

G E O R G I A SOLID WASTE MANAGEMENT A N N U A L R E P O R T



AUGUST 1998

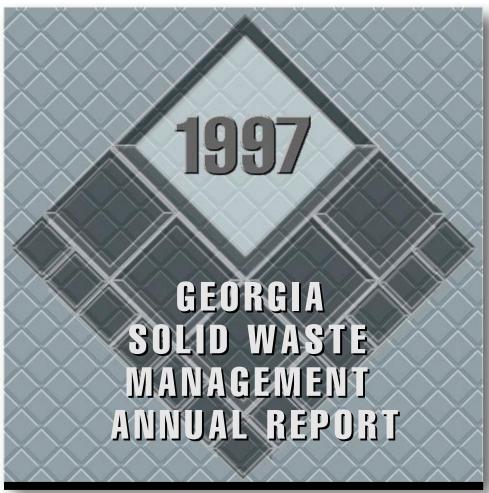


TABLE OF CONTENTS

Acronyms Used in This Report4 Results of the Solid Waste Management Survey and Full Cost Report8 Solid Waste Collection9 Solid Waste Grants and Loans Made to Local Governments......18

Georgia Department of Community Affairs

60 Executive Park South, NE Atlanta, GA 30329-2231 (404) 679-4940

An Equal Opportunity Employer

If you are disabled and would like to receive this publication in an alternative format, please contact the Georgia Department of Community Affairs at (404) 679-4915 or 1 (800) 736-1155 (TDD).



FOREWORD

he 1997 fiscal year brought changes and challenges to Georgia's system of solid waste management. We faced important milestones in the State's waste reduction strategy with the passing of the waste reduction goal deadline and the implementation of the long-awaited yard trimmings ban. We adjusted our strategies according to lessons learned during the last several years. As we approached the closure of many of the state's unlined landfills, we anticipated the complications those sites may bring in the future.

Though the state did not meet the 25% waste reduction goal by the July 1, 1996, deadline set forth in the 1990 Georgia Comprehensive Solid Waste Management Act, State agencies faced waste reduction issues with renewed determination. We continued to work toward the goal as if the deadline had not passed, and a mid-year opinion by Attorney General Thurbert Baker confirmed that the goal does indeed still exist.

For the first time in three years, Georgia's per capita waste disposal figure decreased. While we are pleased that its movement was toward our goal, the overall figures are still sobering. Last year, we reported that Georgians disposed of 7.43 pounds per capita per day, the largest amount since we began tracking disposal figures in 1992. This year, the figure is 7.35—lower, but by only 1%. Because no data gathering effort is perfect, we are aware that such a small change falls within the margin of error. Our excitement is further tempered by the realization that, because our waste disposal numbers have increased over the last several years, Georgia will now have to reduce waste by 27%—not just 25%—to reach our goal.

The implementation of the yard trimmings ban was an important factor in reducing, or at least maintaining, the amount of waste Georgians sent to landfills. The ban, which went into effect September 1, 1996, keeps grass clippings, leaves, and small wood debris out of most of the state's lined landfills. While it has helped curb disposal, the ban has also left local governments looking for alternative methods of handling yard trimmings for their residents. As usual, many of Georgia's local government officials came through with innovative, cost-effective solutions.

Also in FY97, State agencies took a second look at statewide planning completed in 1990. Drawing on the experience of the previous years, the agencies outlined a new set of strategies in the *Georgia Solid Waste Management Plan: 1997.* The new plan shifts the focus of State efforts to waste produced by private industry and to the new roles local governments play in delivering solid waste management services as private waste management companies take over more and more of these responsibilities.

State agencies and local governments alike spent much of FY97 planning for the closure of 15 vertically expanded, unlined landfills. As a result, we saw an increase in the problems closure can bring. Methane gas and groundwater contamination monitoring gave a hint of what local governments may be paying in the future to keep residents safe from the disposal practices of the past.

Solid waste management remains a major issue in Georgia. We have come a long way during the last several years, but our progress is helping us identify even more challenges. To continue successfully, we will need to emphasize the effects that solid waste has on other areas of our environment, and we will need support from State leadership to ensure adequate resources for carrying out our efforts.

JUM HIGDON
COMMISSIONER
GEORGIA DEPARTMENT OF

COMMUNITY AFFAIRS

HAROLD REHEIS

DIRECTOR

Environmental
Protection Division
Georgia Department of

NATURAL RESOURCES

G. ROBERŤ KERR

DIRECTOR

POLLUTION PREVENTION

ASSISTANCE DIVISION

GEORGIA DEPARTMENT OF

NATURAL RESOURCES

PAUL R. BURKS
EXECUTIVE DIRECTOR
GEORGIA ENVIRONMENTAL
FACILITIES AUTHORITY

Acronyms Used in This Report

11119	neµor-t
C&D	Construction and Demolition Landfill
DCA	Georgia Department of Community Affairs
DNR	Georgia Department of Natural Resources
DRI	Developments of Regional Impact
EPA	US Environmental Protection Agency
EPD	Georgia Environmental Protection Division (DNR)
GEFA	Georgia Environmental Facilities Authority
GHEP	Georgia Hospitality Environmental Partnership (DCA)
KAB	Keep America Beautiful, Inc.
LDF	Local Development Fund
LEL	Lower Explosive Limit
LGEG	Local Government Efficiency Grant
MRF	Materials Recovery Facility
MSW	Municipal Solid Waste
MSWL	Municipal Solid Waste Landfill
P ² AD	Georgia Pollution Prevention Assistance Division (DNR)
RDC	Regional Development Center
RMPF	Recycled Materials Processing Facility
SWM	Solid Waste Management
UGA	University of Georgia

PURPOSE OF THIS REPORT:

he Georgia Comprehensive Solid Waste Management Act of 1990 requires that the Department of Community Affairs (DCA), with the cooperation of the Department of Natural Resources' Environmental Protection Division (EPD) and the Georgia Environmental Facilities Authority (GEFA), provide an annual report on the status of solid waste management in Georgia to the Governor and General Assembly {O.C.G.A. § 12-8-31 (d)}. The Department of Natural Resources' Pollution Prevention Assistance Division (P²AD), created after passage of the Act to encourage pollution prevention activities by business and industry, also contributes to this report.

As specified in the Act, the FY97 report, covering the period of July 1, 1996 to June 30, 1997, contains information on:

- the status of local and regional solid waste management planning in Georgia;
- the number and types of solid waste handling facilities in Georgia;
- the remaining permitted capacity of each permitted solid waste handling facility;
- the number and types of solid waste grants and loans made to local governments;
- a compilation and analysis of solid waste management data provided by cities and counties in their annual reports;
- a statement of progress achieved in meeting the 25% waste reduction goal established in subsection (c) of Code Section 12-8-21;
- a statement of progress achieved in solid waste management education;
- · any revisions in the state solid waste management plan deemed necessary; and
- recommendations for improving the management of solid waste in the state.

LOCAL AND REGIONAL SOLID WASTE MANAGEMENT (SWM) PLANNING IN GEORGIA

ocal governments in Georgia have overwhelmingly opted against "going it alone" with respect to solid waste management planning. Since passage of the Georgia Comprehensive Solid Waste Management Act of 1990, which required that all local governments prepare or be included in a solid waste management plan by July 1, 1993, only 5% of the State's 692 cities and counties have developed plans that pertain solely to their jurisdictions. Thirty-six counties and 126 cities—about 23% of all local governments—have participated in regional planning efforts, while the remainder have developed joint county-city plans (i.e., plans that cover a county and one or more cities within that county). As of June 30, 1997, only one county and 15 cities had failed to submit a solid waste management plan to DCA for approval. Local governments that have not submitted plans are listed in Appendix A.

The Solid Waste Management Act specifies that local government plans must provide assurance of adequate disposal capacity and handling capability for a 10-year period. Additionally, the Act requires governments to identify in their plans all local solid waste handling facilities; sites not suitable for solid waste facilities based on environmental and land use factors; and strategies for helping the State achieve a 25% per capita reduction in the amount of waste being received at disposal facilities. To ensure that local governments develop plans in accordance with the Act, DCA established Minimum Planning Standards and Procedures for Solid Waste Management. All local solid waste management plans as well as major plan amendments and updates must be reviewed and approved by DCA in order for governments to be eligible to receive solid waste permits, grants, and loans.

The Minimum Planning Standards and Procedures for Solid Waste Management require local governments to make major amendments to their plans when changes occur that alter the basic tenets of the plans or affect another local government. At a minimum, major plan amendments include:

- changes that affect a local government's assurance of 10-year handling capability;
- changes that affect a local government's assurance of 10-year disposal capacity;
- changes that affect a local government's strategy toward achieving the 25% statewide waste reduction goal;
- changes that affect the identification of land areas unsuitable for a solid waste handling facility; or
- changes in any solid waste facilities, such as new facilities or major modifications of existing facilities, requiring EPD permits.

1997 Solid Waste Management Annual Report

In FY97, major amendments were made to five solid waste management plans, covering 18 local governments, to identify changes in waste disposal strategies (e.g., closing a county landfill and contracting with a private disposal facility). About a dozen other plan amendments were made for the purpose of including recycling and waste reduction projects for which local governments intended to request State financial assistance.

Most cities and counties will be required to prepare updates to the short term work programs of their solid waste management plans in FY98 and the first half of FY99. These work programs, which are to cover the final five years of a plan's original ten-year planning period, must contain information on planned solid waste facility and program operations; land, equipment, or other purchases; administrative arrangements; budgets; and time frames for implementation. Local governments must submit their short term work programs to their regional development centers for review and to DCA for approval or risk losing their eligibility to receive solid waste permits, grants, and loans.

To assess potential impacts of new and expanding solid waste disposal facilities on surrounding jurisdictions, rules developed pursuant to the Georgia Planning Act require that such facilities be reviewed as Developments of Regional Impact (DRIs). In addition to ensuring that proposed projects are consistent with the comprehensive and solid waste management plans of all potentially affected jurisdictions, the DRI review process considers impacts on the region's natural resources, economy, and public infrastructure. Ideally, the DRI review process also identifies opportunities for cooperation and recommends the construction of facilities that will serve more than one local government where appropriate.

Since 1991, 22 proposed solid waste disposal facilities have been reviewed as DRIs. Between July 1996 and June 1997, four new facilities were proposed, including one inert landfill and three new Subtitle D landfills. One of these facilities, in Effingham County, includes areas for recycling and composting in addition to disposal of solid waste and sludge. As a result of the DRI process, all of the landfills proposed in FY97 were found to be in the best interest of the state.

The Act also requires regional development centers (RDCs) to develop regional comprehensive plans, which must include solid waste management where it is considered by the RDC board to be of regional significance. To begin this process, RDC staff members prepare an inventory and analysis based on the local comprehensive plans developed within their region. Based on this document, the RDC board determines an implementation strategy, which becomes the functioning plan.

A total of 14 regional plans will be completed by fiscal year 2000 (two groups of two RDCs are developing plans together). To date, over half of the regional plans have been approved by DCA and adopted by the participating regions. Each of the plans addresses solid waste management issues, though the references may be minimal.

PROGRESS TOWARD THE 25% WASTE REDUCTION GOAL

hough Georgia's 25% waste reduction goal was originally set in terms of a calendar date that has passed (July 1, 1996), the goal is still in effect. According to an opinion issued by State Attorney General Thurbert Baker in July 1997, the intent of the original legislation was "the requirement of active involvement in programs for reducing waste." Baker wrote that State and local efforts to meet the goal should continue.

For the first time in four years, Georgia can report that per capita solid waste disposal decreased from the previous year. In FY97, Georgians disposed of 9,863,766 tons of solid waste, or 7.35 pounds per capita per day.¹ Though actual tons disposed of in FY96 was lower (9,775,315), the per capita figure that year was 7.43, or 1% higher than in FY97.

	(MILLIONS)	(Mil	(MILLIONS OF TONS)		(Pound	(Pounds per Person per Da	
FY	State Population**	Total Disposed	In State	Out of State	Total	In State	Out of State
1992	6.63	8.60	NA	NA	7.11	NA	NA
1993	6.77	8.25	8.15	0.10	6.68	6.59	0.08
1994	6.90	8.58	8.45	0.14	6.81	6.70	0.11
1995	7.06	9.54	9.38	0.16	7.41	7.28	0.12
1996	7.21	9.78	9.61	0.16	7.43	7.31	0.12
1997	7.35	9.86	9.69	0.17	7.35	7.22	0.13

Despite this slight progress, Georgians still disposed of 3% more waste per capita in FY97 than in FY92, the base year for calculations. The base year disposal figure is 8,604,115 tons or 7.11 pounds per capita per day. To meet the 25% reduction goal, the state will have to reduce waste disposed of to 5.33 pounds per person per day. To meet that goal, Georgians will need to reduce waste by 27% from the FY97 figure.

Out-of-state waste continues to have minimal impact on Georgia's disposal figures. While the amount of out-of-state waste coming into Georgia increased to 172,150 tons, or 6% greater than last year, it still accounts for less than 2% of the state's waste stream.

Of the waste disposed of during FY97, 82% was disposed of in municipal solid waste landfills (MSWLs), and 18% was disposed of in construction and demolition landfills (C&Ds). While the amount of waste has increased, so has the percentage of waste being disposed of in safer facilities. Of the tons disposed of in MSWLs, 73% went to lined landfills. In FY96, 65% of MSW was disposed of in lined landfills.

WASTE DISPOSED OF IN GEORGIA*

*	Disposal figures compiled in	bу
	EPD based on landfill reports	

^{**} Population figures were provided by the US Census Bureau as of the beginning of the fiscal year period.

WASTE DISPOSAL BY FACILITY TYPE

(MILLIONS OF TONS DISPOSED)

Total*	9.86
C&Ds	1.76
Unlined MSWLs	2.21
Lined MSWLs	5.90
MSWLs (total)	8.11

^{*} Numbers do not equal total because of rounding.

¹ An additional 111,810 tons were disposed of in the state's only waste-to-energy facility. This amount is not included in calculating progress toward the 25% waste reduction goal per a 1993 amendment to the Georgia Comprehensive Solid Waste Management Act.

RESULTS OF THE SOLID WASTE MANAGEMENT SURVEY AND FULL COST REPORT

nder the Comprehensive Solid Waste Management Act, each local government must submit an annual report to DCA documenting the status of its solid waste services. DCA collects this information through the Solid Waste Management Survey and Full Cost Report. In addition to forming the basis of the statewide annual report, the survey provides useful information for planning, evaluation, and public education purposes. Within 30 days of submitting its annual survey to DCA, each local government must publish a public notice listing the full cost of providing solid waste services to constituents within its jurisdiction. By disclosing these costs, the full cost report is intended to educate citizens on the need to manage waste properly and efficiently.

The 1997 Solid Waste Survey and Full Cost Report was disseminated to the state's 159 counties and 533 cities to cover the reporting period of July 1, 1996, through June 30, 1997. The survey consisted of 42 questions designed to measure the level of solid waste services provided and the cost of those services. Each of the 159 counties responded to the 1997 survey. Of the 533 municipalities, 522 (98%) responded to the survey. Each of the governments failing to submit a survey during the time period covered by this report has a population of 1,500 or less. (These governments are listed in Appendix A). Georgia's three consolidated governments (Athens-Clarke County, Augusta-Richmond, and Columbus-Muscogee) are treated as counties for the purposes of the survey.

Some cities and counties that did not respond prior to publication of the five previous annual reports complied with the reporting requirements later. These late responses have been incorporated into DCA's database, sometimes leading to slight discrepancies between historical figures shown in this report and numbers reported in previous years.

Information from the survey has been divided into sections on Solid Waste Collection, Recycling, Yard Trimmings Management, Solid Waste Disposal, Solid Waste Education, and Full Cost of Solid Waste Management. The Solid Waste Disposal section has been supplemented with landfill data provided by EPD.

SOLID WASTE COLLECTION

The majority of Georgia's local governments (85%) arranged for solid waste collection services in their jurisdictions. While essentially all of these jurisdictions had residential collection, 55% of the counties and 67% of the municipalities also arranged for collection of commercial solid waste. The number of local governments providing collection for businesses decreased from 391, or by 16, since last year. In FY95, 372 local governments offered collection of commercial solid waste.

Local governments can use a variety of methods to arrange for collection of solid waste, including directly providing the service themselves, arranging for another local government or authority to provide the service, and working with private vendors. For the second year, a larger percentage of local governments reported arranging for collection through private vendors (66%) than providing it directly (59%). A significant number of local governments provided collection services through another local government (16%), while only a limited number provided collection through an authority (3%). The role of authorities is expected to increase during FY98, when the Crisp County Solid Waste Management Authority's MSW composting facility begins accepting waste from more than 40 southwest Georgia communities.

In FY97, the preferred method of residential waste collection in municipalities where this service was available was curbside pickup (85%). In counties with residential collection services, waste was

most often collected using many large, unmanned collection bins, commonly called green boxes, scattered throughout the county (51%). Though used by 64 counties, green boxes served just 16% of the state's population and were generally used by counties with populations of 15,000 or less. Last year, green boxes were used by 77 counties serving 22% of the state's population. Since 1993, the first year local governments reported available solid waste collection options, 35 counties and 29 cities have discontinued the use of green boxes. Because these unstaffed drop-off boxes can lead to unattractive and unhealthy collection sites and a lack of accountability for waste generation and disposal, minimizing their use is an important element in improving solid waste management in the state.

For the first year, the survey asked respondents to list the number of green boxes, staffed drop-off centers, and unstaffed drop-off centers available to residents. The resulting numbers illustrate the efficiencies brought by the more centralized approach of drop-off centers with multiple collection containers for solid waste and recyclables. Sixty-one local governments reported staffing 214 drop-off centers, an average of 3.5 centers per government. Sixty-two local governments reported providing 378 unstaffed centers, an average of 6.1 centers per government. In contrast, 103 local governments reported providing 9,525 green boxes, an average of 92.5 boxes per government.

Of the local governments arranging for residential collection, 37% of counties and 79% of municipalities charged a fee for the service, an increase of 21 local governments over last year. Though the majority charged residents a flat fee, nine counties and 11 cities reported charging residents a fee based on the amount of waste they throw away. These unit-based pricing systems make each user financially responsible for his or her disposal habits, thus encouraging waste reduction.

SOLID WASTE COLLECTION	COUNTY	Сіту
Arrange for Collection	125	456
Arrange Collection Through	%	
Own Government	74	55
Another Government	20	15
Authority	7	2
Private Vendors	94	59
Other	2	<1
Arrange for Commercial Collection	69	306
Arrange for Residential Collection	125	447
Collection Methods:	9	6
Curbside	27	85
Backdoor	9	28
Staffed Drop-off Centers	37	3
Unstaffed Drop-off Centers	20	8
Green Boxes	51	9
Charge Fees for Residential Collection	46	352
	9	6
Flat-Rate	80	98
Unit-Based	20	3

NOTES FOR ALL TABLES:

Percentages may total more than 100 because some local governments answer in more than one category.

159 counties and 522 cities reported on their 1997 SWM practices. All statistics and tables are based on these reports unless otherwise noted.

RECYCLING

Recycling puts materials that otherwise would be discarded to use as raw materials in the production of new products. In FY97, 89% of counties and 67% of municipalities reported that recycling services were available to their residents. This is three more counties than last year, but 24 fewer cities. Though the number of cities and counties with recycling services available is still more than double what it was when the first survey was

RECYCLING EFFORTS	COUNTY	CITY
Recycling Services Available	141	351
Recycling Services Available for Residents	138	351
Arrange Services Through	(%
Own Local Government	74	42
Another Local Government	21	33
Private Vendor(s)	43	42
Not-for-profit Organization	28	22
Collect and Process Through	Ç	%
Curbside Recycling	14	36
Staffed Drop-Off Facilities	61	27
Unstaffed Drop-Off Facilities	49	53
Materials Recovery Facility	7	5
Recovered Materials Processing Facility	9	3
Reuse	21	10
Other	14	6

necycling betvices hyuntable for businesses	11~	200
Arrange Services Through		%
Own Local Government	52	36
Another Local Government	13	35
Private Vendor(s)	54	47
Not-for-profit Organization	28	21
Other	4	2
Collect and Process Through		%
Curbside Recycling	21	34
Staffed Drop-Off Facilities	62	29
Unstaffed Drop-Off Facilities	39	49
Materials Recovery Facility	7	7
Recovered Materials Processing Facility	8	4
Reuse	11	6
Other	9	7
Purchase Recycled Products	120	299

conducted in 1992, FY97 was the first time the total had fallen in the six years of the survey. Most of the cities that no longer had residential recycling services were in the smallest population category (less than 500).

Businesses and industries had access to recycling services in 70% of Georgia's counties and 49% of cities in FY97. This is significantly lower than last year, when 84% of counties and 65% of municipalities—106 more local governments in all reported that recycling services were available to **businesses** in their jurisdictions. Almost onethird of those responding that the services were no longer available were cities in the smallest population category.

Because the 1996 survey was the first to ask local governments whether recycling services were available to businesses, no trend analysis can be made. However, given anecdotal evidence on the high level of recycling activity in the state, increased support for business and industrial recycling and

REGIONAL WASTE REDUCTION: BARNESVILLE

A primary challenge for small community recycling programs is to generate enough volume to attract markets for the sale of recyclables. The City of Barnesville in Lamar County has surmounted this challenge by cooperating with neighboring counties in a comprehensive recycling program.

Two years ago Barnesville contracted with Monroe and Spalding counties and the City of McDonough to accept their recyclable materials for free. This arrangement allows Barnesville to generate the volume needed to make recycling cost effective while allowing its partners to divert material from their waste streams, thus decreasing their landfill costs.

The program operates with one 5,000 square foot facility. Recyclable materials are collected by the other counties in roll off containers and transported to Barnesville. There, the recyclables are processed by one prisoner, one part-time worker, and two full-time staff members.

The facility collects PET and HDPE plastics, paper, magazines, newspaper, steel cans, aluminum cans, and corrugated cardboard. Polystyrene and plastic bags are accepted from Barnesville residents only.

While the City of Barnesville, with a population of about 5,000, may not have been able to support a successful recycling program on its own, the participation of another city and two counties allows the program to divert about 26 tons of recyclable materials from Georgia landfills each month.

reduction efforts by P^2AD , and an increase in the number of recycling companies in the state, it is likely that local governments misreported at least one of the two years. Efforts will be made to clarify the survey question and instructions in the future.

ALTERNATIVE LABOR IN PROCESSING RECYCLABLES: GWINNETT COUNTY

Almost one-third of Georgia counties reported using inmates to process the recyclable materials they collected during 1997. Gwinnett County is one of the largest users of this type of alternative labor. The County credits Community Work Programs (CWPs) with saving between \$400,000 and \$500,000 each year.

Gwinnett has used CWPs since the 1980s, when inmates began working on roadside cleanups. A decade later, inmate work included processing recyclables at the County's recovered materials processing facility (RMPF).

Gwinnett CWP participants work with the public, unload vehicles, carry materials to the processing area, clean up around the site, and pick up litter. Workers handsort materials on conveyor belts and operate lifts, front-end loaders, and balers. Participants with strong mechanical and carpentry skills are also used for various tasks that require specific skills.

Gwinnett County CWPs are made up of two correctional officers and 30 to 50 inmates. In addition, a canine patrol is used every six weeks or any time drugs are suspected. Minor problems experienced by Gwinnett County include equipment abuse and alcohol consumption from bottles dropped off that are not completely empty. Most problems are handled by the correctional officers, who have the authority to deny inmates their work privileges.

Once an inmate works a certain number of hours on a specified detail and labor skills have been proven, a work certificate is issued. Inmates may use these certificates when searching for employment following parole.

Georgia residents are more likely to receive recycling services directly from their own local government, while businesses are more likely to receive them through a private vendor. About 30% of local government jurisdictions rely on another local government to provide services for residents and/or

businesses. Not-for-profit organizations also play a major role in providing recycling services, with more than one-fifth of local governments that have services available relying on them. As with solid waste collection, local government authorities are expected to play a bigger role in providing recycling services in future years.

Most local government jurisdictions with residential recycling services offer collection of recyclables at drop-off centers that are either unstaffed (52%) or staffed (37%). Though only 30% of local governments with residential recycling offer curbside collection, their jurisdictions include 43% of the state's population. Curbside collection is generally more costly for local governments, but it is more effective in garnering participation by residents. The practice of sorting commingled residential recyclables at recovered materials processing facilities (RMPFs) is still rare in Georgia, with only 24 local governments using this type of facility. Separating recyclables from solid waste at a materials recovery facility (MRF) is slightly more common, with 26 local governments recovering recyclables in this way.

Many local governments turn to alternative labor resources to process recyclables more cost effectively. Inmate labor is used by 33% of counties and 12% of cities with residential recycling services. Community service workers are used by 28% of counties and 11% of cities. Disabled persons assist 16% of counties and 6% of cities.

As with residential collection of recyclables, collection of recyclables generated by businesses is most often performed through unstaffed (46%) or staffed (39%) dropoff facilities. Again, as with residential collection, only (30%) of local jurisdictions have curbside collection of recyclables available for businesses, but curbside

MATERIALS RECYCLED	County	Сіту
Residential Recycling Services Available	138	351
Materials Recycled		%
Tires	54	19
Batteries	37	13
Aluminum	86	81
Newspaper	90	91
Magazines	67	62
Corrugated Cardboard	78	63
Other Paper	51	45
Glass	62	69
PET and HDPE Plastics	62	67
Other Plastics	18	21
White Goods	83	37
Christmas Trees	63	52
Construction/Demolition Material	s 23	7
Steel Cans	51	33
Aerosol Cans	12	5
Paper Board	29	17
Scrap Metal	75	32
Motor Oil	38	16
Phone Books	44	41
Agricultural Chemical Containers	12	3
Household Hazardous Waste	2	1
Other	7	4
Pusiness Degraling	119	95G

Susiness Recycling	112	256
Services Available		
Materials Recycled	(%
Tires	41	21
Batteries	30	18
Aluminum	78	75
Newspaper	81	88
Magazines	60	62
Corrugated Cardboard	85	79
White Paper	59	59
Green Bar Computer Paper	45	52
Other Paper	46	49
Glass	54	64
Plastic	53	64
Phone Books	38	45
Construction/Demolition Materials	21	7
Scrap Paper	62	34
Motor Oil	32	18
Other	6	4

collection is most prominent in more populous jurisdictions. Most jurisdictions that use MRFs or RMPFs to process residential recyclables also use them to process recyclables collected from businesses.

Newspaper is the most commonly accepted item for recycling for both residents (in 91% of local jurisdictions) and businesses (in 86% of local jurisdictions). For residents, aluminum is the second most commonly accepted material, with outlets in 83% of local jurisdictions. Magazines, corrugated cardboard, glass, PET and HDPE plastics, white goods, and Christmas trees are all recycled in more than half of Georgia's local government jurisdictions. Larger items that are more difficult to collect in curbside programs are more likely to be recycled in counties than in cities. These items are typically easily separated at transfer stations and landfills, which are more often managed by counties. For example, 83% of counties with recycling services responded that recycling of white goods (appliances) was available, while only 37% of cities did. Recycling of scrap metal and tires is also more common in counties.

For businesses, corrugated cardboard recycling is more likely to be available than any type of recycling other than newspaper. Recycling of aluminum, magazines, white paper, glass, and plastic is also available to businesses in more than half of Georgia's local government jurisdictions.

The table on page 11 lists selected recyclable materials and the percentage of local governments with recycling services collecting those items.

YARD TRIMMINGS MANAGEMENT	County	Сіту
Promote Home Composting & Grasscycling	46	91
Require Separation of Yard Trimmings	125	411
Provide for Collection & Disposal of Yard Trimmings	86	301
Collection Options		%
Staffed Drop-off Facilities	65	5
Unstaffed Drop-off Facilities	12	5
Curbside Collection	17	92
Other	9	2
Processing Methods		%
Composting	20	26
Solid Waste Landfill	2	12
Inert Landfill	47	34
Grind/Chip into Mulch	70	61
Other	3	5

YARD TRIMMINGS MANAGEMENT

As of September 1, 1996, each city, county, and solid waste management authority must require separation of yard trimmings from solid waste before collection and keep those yard trimmings out of MSWLs with vertical expansions or with liners and leachate collection systems. According to survey responses, 79% of Georgia's local governments met the requirement. Of this group, 69% of counties and 73% of cities provided for collection and an alternative use or disposal of the yard trimmings in their jurisdictions.

More than 90% of the cities providing for yard trimmings collection picked them up at the curb. Among counties, the majority picked up yard trimmings through staffed drop-off facilities, but a significant portion used curbside collection. Most of these local governments processed their collected yard trimmings using the preferred methods listed in the legislation—63% chipped yard trimmings into mulch, and 24% composted the materials. More than a third of local governments simply diverted the yard trimmings from a solid waste landfill to an inert landfill after collection. Two counties and 35 cities reported disposing of their yard trimmings in a solid waste landfill.

SOLID WASTE DISPOSAL

LOCAL GOVERNMENT PRACTICES

Overwhelmingly, Georgia cities (63%) and counties (60%) sent their municipal solid waste to publicly-owned landfills. Counties were more likely to own the landfill themselves (59%), while cities were more likely to send waste to a facility owned by another government (88%). From FY96 to FY97, local governments continued the trend of moving away from the use of public disposal facilities to private ones. Last year, 478 local governments used public landfills and 186 local governments used private landfills. This year, only 415 local governments disposed of waste in public landfills, and 195 local governments reported using private landfills. (Many local governments have traditionally reported using more than one type of disposal facility, accounting for the significant reduction in the use of public landfills without a corresponding increase in other areas.) A few governments used a waste-to-energy facility for MSW; employed air curtain destructors or biomedical waste incinerators for special wastes; or shipped their waste out of state.

Nine fewer governments reported owning MSWLs in FY97, following the downward trend since the question was first asked on the survey in 1993. Many local governments now rely on transfer stations, which allow individuals and small haulers to bring their waste to a centrally located facility

before it is transferred to a landfill, often in a different county. In FY97, 48 counties (30%) and 16 cities (3%) operated transfer stations. Though the number of local governments operating transfer stations has almost doubled since 1993, only one county has been added since last year. Unexpectedly, three fewer cities reported operating transfer stations this year than in FY96.

The accompanying table shows the number of local governments owning different types of solid waste facilities. Though Georgia has only one MSW waste-to-energy facility, several local governments reported operating incinerators. These were air curtain destructors, generally used to dispose of wood wastes, or biomedical waste incinerators.

All counties and all but two cities operating MSWLs charged haulers, individuals, or other local governments for disposing of materials at their facilities. The average per ton charge, commonly called a tipping fee, was \$25.70 at county-owned facilities and \$27.49 at city-owned facilities. Local governments were less likely to charge disposal fees at transfer stations. Of the 16 cities operating transfer stations, only 3 (19%) reported collecting a fee, at an average charge of \$39.67 per ton. Forty of 48 counties (83%)

operating transfer stations charged fees, averaging \$35.84 per ton. Since FY96, average tipping fees increased by up to \$5 in all categories except county landfills, which decreased by about \$2.

LOCAL GOVERNMENTS OPERATING WASTE		
FACILITIES	COUNTY	CITY
Transfer Stations	48	16
Materials Recovery Facilities	12	7
Inert Waste Landfills	59	46
C&D Landfills	20	4
MSW Landfills	59	11
Incinerators (Air Curtain Destructors or Biomedical Waste Incinerators	2 s)	2

SOLID WASTE HANDLING FACILITIES

While the number of Subtitle D landfills in Georgia has increased since 1996, the number of facilities overall has decreased. This is consistent with the State's goal of closing unsafe landfills.

SOLID WASTE HANDLING FACILITIES*	1996	1997
Municipal Solid Waste Landfills (MSWLs)	101	95
Subtitle D and Lined**	35	39
Unlined	66	56
Construction & Demolition Landfills (C&D	s) 35	35
Landfills That Ceased Receiving Waste	13	12
Industrial Solid Waste Handling Facilities:	75	76
Industrial Waste Landfills	59	57
Industrial Waste Incinerators	5	6
Other	11	13
Permit-by-Rule Facilities:	2,210	2,646
Inert Landfills	1,633	1,990
Transfer Stations	106	127
Collection Operations	352	398
Other	119	131
Waste-to-Energy Facility	1	1
Additional Facilities	4	5
Materials Recovery Facilities	2	3
MSW Composting Facilities	2	2

^{*} Data provided by EPD.

Because the newer landfills are more expensive to construct and difficult to site, they are generally built with greater capacity than the old unlined landfills were. As a result, fewer landfills will be required to meet the state's needs in the future. Of the MSWLs operating in FY97, 80 were owned by local governments, and 15 were owned by private firms. Of the C&D landfills, 21 were publicly owned, and 14 were owned by private firms.

The number of unlined MSWLs will decrease dramatically in FY98 because of a 1993 statute that required vertically expanded, unlined landfills to cease accepting waste by July 1, 1998. Fifteen of the 56 unlined MSWLs (or 27%) will be affected.

Inert landfills, which are permit-by-rule facilities, accounted for 357 new facilities in FY97. These are often very small landfills at construction sites and are used only for the duration of a construction project. The types of waste that may be disposed of in inert landfills are limited to earth and earthlike products, concrete, cured asphalt, rocks, bricks, yard trimmings, and land clearing debris such as stumps, limbs, and leaves. Users of this type of disposal method are simply required to notify EPD; they do not go through a full permitting process.

The significant increase in number of inert landfills was expected because of the implementation of an open burning ban in May 1996. This ban prevents open burning of land-clearing debris in the metro Atlanta area during the summer months. Increased development and/or an increase in reporting by developers could also have contributed to the growing number of facilities. The actual number of inert landfills may be lower than reported here because EPD may not always be notified of closure of these facilities.

Growth in the number of inert landfills is expected to slow in FY98 because of a new EPD rule that limits the number of inert

landfills in new developments by requiring a 100-foot buffer zone between buried waste and enclosed structures. The new rule became effective in August 1997.

The table above compares the number of different types of solid waste disposal facilities operating in Georgia as of June 30, 1996 and June 30, 1997.

^{**} Subtitle D landfills are built to current Environmental Protection Agency requirements. Some lined landfills were built before the Subtitle D landfill regulations were completed and may not meet all of the requirements. In FY97, 26 of Georgia's landfills met Subtitle D requirements, compared with 22 in FY96.

REMAINING PERMITTED CAPACITY OF SOLID WASTE DISPOSAL FACILITIES

FY97 growth in remaining capacity of Georgia's MSWLs and C&Ds slowed dramatically from the previous year. Last year, EPD reported a 42% increase in capacity over FY95. Growth from FY96 to FY97, however, was only 3%. In FY96, 85% of the state's landfills reported a total remaining capacity of 214,322,055 cubic yards. In FY97, 89% of the state's landfills reported a total of 220,424,639 cubic yards of remaining capacity. More than half of the increase can be attributed to the increased reporting rate. The remainder was generated by newly constructed and opened facilities.

The majority of the remaining capacity, 200,325,087 cubic yards, was in MSWLs. Of this amount, 189,047,290 cubic yards, or 94%, was in lined landfills.

The rate-of-fill grew more at a faster pace than capacity during the fiscal year. From FY96 to FY97, the rate-of-fill increased by 7%, from 51,133 to 54,631 cubic yards per day. During the previous fiscal year, the rate-of-fill grew by only 2%. Based on current data, the average Georgia landfill will fill in about 13 years.

Even with the required closure of 15 unlined MSWLs by July 1, 1998, the remaining capacity of Georgia's landfills will not be significantly affected. The combined remaining capacity of those 15 landfills is only 2,831,910 cubic yards, or 1% of MSWL remaining capacity. Furthermore, new landfills scheduled to open within the next year will more than offset the losses. As of June 30, 1997, 11 MSWLs and one C&D were under construction with a total capacity of 25,961,469 cubic yards, about 12% of current capacity. Though in the past much of the growth in landfill capacity has been attributed to private companies, it is interesting to note that local governments own all 12 facilities under construction at the end of FY97.

Appendix B shows the FY97 remaining permitted capacity and estimated fill dates of reporting sites.

SOLID WASTE PUBLIC EDUCATION

In 1997, 53% of counties and 25% of municipalities reported having public education programs, 40 fewer governments than reported having programs last year. Of these programs, 66% of counties and 71% of cities reported being affiliates of Keep America Beautiful, Inc. (KAB). These affiliates are also supported by DCA's Keep Georgia Beautiful program, the state KAB affiliate. Most counties (93%) and cities (62%) with education programs contributed financial resources to educational efforts.

REMAINING CAPACITY*

(MILLIONS YDS.3)

Total**	220.42
C&Ds	20.10
Lined MSWLs	189.05
MSWLs (total)	200.33

- * Information provided by EPD.
- ** Numbers do not equal total because of rounding.

PUBLIC EDUCATION: ALBANY-DOUGHERTY COUNTY YARD TRIMMINGS PROGRAM

Keep Albany-Dougherty Beautiful (KADB), formerly the Albany-Dougherty Clean Community Commission, faced a monumental challenge in August of 1996-to educate their citizens in one month about a change in State law prohibiting the disposal of yard trimmings in most MSWLs. Previously, Albany residents had disposed of some of their yard trimmings with their household garbage. Now they needed to be informed that they could no longer commingle their yard trimmings with their household garbage. Nor could they place yard trimmings in plastic 90-gallon cans or plastic bags, but were required to pile their trimmings neatly by the curb for pickup.

In order to meet this challenge KADB developed a comprehensive educational

campaign. The campaign had several components, including public service announcements for local television and radio stations and notices in the local newspaper. KADB also generated informative door hangers and magnets that were distributed by the City Public Works Department to every customer. KADB staff made appearances on local television shows and spoke before civic organizations. Notices appeared in 37,000 utility bills and in the newsletters of many local companies.

With funding from the City of Albany's Solid Waste Enterprise Fund, KADB spent \$23,109 on the materials for the campaign. The City spent an additional \$36,374 in in-kind costs, such as staffing and equipment. All of the planning, time, and expense paid off in the end. The program has enjoyed a 90% participation rate since its beginning.

FULL COST REPORT

The Solid Waste Management Act requires each local government to calculate and publish its full cost of providing solid waste management services for the most recent fiscal period. When calculated correctly, full cost includes not only the solid waste budget, but also an allowance for postclosure care (if the government owns a landfill) and expenses for items that often are not charged directly to solid waste services in the budget, such as personnel administration or fleet management. Reported costs do not always include all of these elements.

Georgia's local governments reported a full cost of \$363 million for solid waste services in 1997, up from \$340 million in 1996. On a per capita basis, the full cost of solid waste management equaled \$24.90 for counties and \$74.52 for cities.

Georgia's 17 largest local governments accounted for 40% of total solid waste management expenditures and 45% of revenues. Fifty-seven counties with populations of 25,000 or more accounted for 78% of county expenditures and 80% of county revenues. Ninety-six cities with populations of 5,000 or more accounted for 84% of municipal expenditures and 87% of municipal revenues.

LOCAL GOVERNMENT SOLID WASTE EXPENDITURES

While the table below summarizes per capita costs for counties and municipalities of various sizes, exact cost comparisons among governments are not possible for three primary reasons. First, some counties may provide solid waste services to a limited population within their jurisdiction—

	Population Group	Number Reporting	Average Expenditures (\$ Millions)	\$ Per Capita
County	100,000 and Above	11	7.01	23.09
	50,000 - 99,999	23	1.48	21.04
	25,000 - 49,999	23	1.03	30.07
	15,000 - 24,999	38	0.60	30.69
	10,000 - 14999	24	0.37	30.08
	Less Than 10,000	40	0.23	35.02
	All	159	1.14	24.90
City	50,000 and Above	6	10.12	72.60
-	25,000 - 49,999	8	2.85	85.87
	10,000 - 24,999	34	1.29	83.47
	5,000 - 9,999	48	0.53	75.89
	2,500 - 4,999	69	0.23	68.46
	1,000 - 2,499	94	0.08	57.17
	500 - 999	81	0.02	38.70
	499 or less	119	0.01	51.89
	All	459	0.35	74.52

perhaps just the unincorporated areas and a few cities. However, when calculating per capita cost, total county population (rather than that of the limited service area) is used, deflating the per capita cost. Second, governments provide varying levels of solid waste services. Costs from governments providing only minimal collection services are combined and compared with those from governments providing more convenient and frequent collection. Generally, municipalities offer more comprehensive collection services than counties, driving up their expenditures. Finally, survey respondents apply varying methods to calculate the full cost of providing solid waste services. Though DCA offers full cost accounting tools for local governments, it is evident from the responses that some simply list their solid waste budgets. Their per capita costs will appear to be lower than those for governments considering the true full cost of providing services.

Counties and cities spent their solid waste dollars somewhat differently in FY97. At 67% of total costs, collection services comprised the majority of solid waste expenditures for municipalities.

Counties spent the largest portion of their solid waste dollars on disposal (61%). For all local governments combined, collection was the costliest item at 51% of total costs, followed by disposal (43%); recycling, composting and mulching (5%); and public education (1%). Though municipalities serve only about 34% of the state's population, their total costs comprised 50% of the state's full costs for solid waste management.

Many local governments charge collection and tipping fees for their solid waste management services. (Refer to the Solid Waste Collection and Solid Waste Disposal sections of this report.) However, revenues did not cover all solid waste management expenditures. According to their full cost reports, cities recovered 91% of their operating costs through these fees, while counties recovered 74% of their costs through fees. Cities did a better job of covering their costs in 1997; in 1996, they recovered only 85% of their costs through fees. Counties recovered 78% of their costs last year.

Generally, the state's larger local governments recovered more of their costs than smaller governments. Georgia's 11 largest counties recovered 74% of their costs through fees, the same as the average for all counties. However, the 40 counties with populations of less than 10,000 recovered only 34% of their solid waste expenditures through fees, relying heavily on general funds, special taxes, and grants to cover costs. The six largest cities took in 11% more than their reported costs through operating revenues, the first time a group has reported more operating revenues than costs. Cities with populations of 5,000 or less recovered 80% of their reported costs through operating revenues.

For the first year, the survey asked local governments to report "other dedicated revenues" in addition to operating fees. These revenue sources include ad valorem taxes, local option sales taxes, and grants. By including the other dedicated revenues, cities recovered 97% of their reported costs, and counties recovered 94%. The information shows that counties relied much more heavily on this type of funding source than cities. Other dedicated revenues contributed 21% of the total revenues for counties and only 6% of total revenues for cities.

The largest portion of county solid waste revenues came from disposal fees (59%), with collection fees also making up a significant portion (39%). For cities, where collection services are generally more comprehensive, collection fees contributed 83% of total solid waste revenues, with only 13% of revenues generated through disposal fees.

Local governments have often cited cost as the primary obstacle to recycling and waste reduction efforts. Though only a small percentage of solid waste expenditures goes toward recycling, an even smaller amount is recovered in revenues. In FY97, local governments reported spending \$17.5 million on recycling, composting, and mulching—only slightly more than they reported spending last year. They received \$10.5 million in revenues from their efforts, or 60% of their waste reduction expenditures. In FY96, local governments spent \$17.2 million on waste reduction activities and received about \$6.5 million in recycling revenues, only 38% of their waste reduction expenditures.

EXPENDITURES BY SERVICE PROVIDED

(% OF TOTAL FULL COST)	COUNTY	CITY
Collection	35	67
Recycling	3	6
Disposal	61	26
Public Ed.	1	1

REVENUES BY SOURCE

(% OF TOTAL REVENUES)	COUNTY	CITY
Collection	39	83
Recycling	2	4
Disposal	59	13
Public Ed.	<1	<1

SOLID WASTE GRANTS AND LOANS MADE TO LOCAL GOVERNMENTS

LOCAL GOVERNMENT GRANT ASSISTANCE: DOOLY COUNTY PESTICIDE PROGRAM

In 1991, Dooly County became one of the first participants in the Department of Agriculture's pesticide container recycling program. The purpose of the program is to collect empty pesticide containers from local farmers and agribusinesses and then chip the plastic into recyclable pellets.

From the beginning, Dooly County has had the largest pesticide container recycling program in the state. According to *The Final Rinse*, a newsletter published by the Department of Agriculture, the County collects 25,000 containers a season.

As Dooly County's program has grown, it has sought assistance from several State sources. In 1996, the County received a grant from DNR to construct and equip a 6,000 square-foot storage shed to hold the pesticide containers prior to chipping. In 1997, Dooly County received a \$76,500 GEFA grant that helped to expand the program. The grant paid for a knuckle-boom loader truck which allows the County to pick up the empty containers from local farmers, making the program more convenient. The GEFA grant also helped to construct a 106-inch thick concrete floor for the storage shed, which helps to prevent the pesticide containers from taminating the ground.

All of these measures helped the program to increase its efficiency and capacity, build on its success, and remain a model for the rest of the state. The State of Georgia assists local governments through grant and loan programs administered by several agencies. These agencies share information on project proposals submitted by local governments to ensure that State support is consistent with statewide solid waste priorities. Project proposals are also reviewed for consistency with local solid waste management plans.

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

Local Development Fund (LDF) The LDF provides funding for a wide variety of local government initiatives. In fiscal year 1997, one LDF grant of \$8,123 funded a solid waste management activity.

Local Government Efficiency Grants (LGEG) The LGEG program was established in 1993 by the Georgia General Assembly to encourage consolidation of local governments and/or local government services. Though 16 of these grants have supported solid waste management projects over the past three years, none of the FY97 awards addressed solid waste issues. LGEG will not continue in FY98.

GEORGIA ENVIRONMENTAL FACILITIES AUTHORITY

Recycling and Waste Reduction Grant Program This grant program assisted 57 local governments with recycling and solid waste reduction in FY97. The awards totaled \$4,027,600, funding projects such as recycling facilities; recycling and composting public information programs; recycling collection and processing equipment; and establishment of variable rate collection programs. Using monies transferred from the Solid Waste Trust Fund, the FY97 program distributed to local governments more waste reduction assistance dollars than ever before.

Low Interest Loans

GEFA makes low interest loans available to cities, counties, and local government authorities to fund environmental infrastructure needs. These loans help communities position themselves to attract economic development and help relieve the financial burden required to meet stringent State and federal environmental standards. In FY97, GEFA loaned \$1,068,000 to two local governments for landfill construction and consolidation of recycling facility debt.

ENVIRONMENTAL PROTECTION DIVISION

Scrap Tire Management Grants This grant program helps communities develop scrap tire enforcement programs and related education efforts such as scrap tire recycling, prevention of scrap tire piles, and cleanup of scrap tire piles. Grants are funded through a \$1 fee assessed on new tires sold within the state. Participating governments provide a 25% cash match. In FY97, 88 local governments received \$2,396,750 for scrap tire pile cleanups and recycling events. An additional \$710,500 was distributed to 22 local governments for scrap tire enforcement and education.

For a complete list of solid waste grant and loan recipients, see Appendix C.

SWM EDUCATION AND TECHNICAL ASSISTANCE STRATEGIES

Public education is a key component of the State's solid waste reduction effort. The Act states that it is "the policy of the State of Georgia to educate and encourage generators and handlers of solid waste to reduce and minimize to the greatest extent possible the amount of solid waste which requires collection, treatment, or disposal" {0.C.G.A. § 12-8-21(b)}. In FY97, Georgia's State agencies continued several strategies for educating citizens, local governments, and businesses on proper solid waste management:

INVOLVE GEORGIA CITIZENS IN PROPER SOLID WASTE MANAGEMENT ACTIVITIES THROUGH SPECIAL EVENTS.

- The seventh annual "Bring One for the Chipper" Christmas Tree Recycling Program, held in 123 cities and counties in January 1997, collected 334,841 Christmas trees at 285 sites. Participation increased despite the greater availability of curbside collection of yard trimmings brought by the ban on yard trimmings at most Georgia landfills. Working with private sponsors, DCA's Keep Georgia Beautiful program (formerly Georgia Clean and Beautiful) coordinated the event and provided publicity tools and tree seedlings to participating communities.
- Governor Zell Miller declared the week of April 20-26, 1997, "Let's Keep Georgia Peachy Clean Week." The second annual statewide cleanup attracted the involvement of 350 communities and groups, nearly triple the involvement of the 1996 effort. The 7,586 volunteers cleaned 1,140 roadside miles, 30 acres of vacant lots, and 43 illegal dumps. They contributed more than 21,000 hours to the effort. The Georgia Peachy Clean Team—composed of the Georgia Departments of Community Affairs, Natural Resources, Public Safety, and Transportation, the Georgia Environmental Facilities Authority, and the state's local KAB affiliates—coordinated the event and provided supplies.

REACH RESIDENTS BY SUPPORTING THE STATE'S 55 LOCAL KAB AFFILIATES.

- DCA's Keep Geogia Beautiful program provided ongoing support to local KAB systems through two executive directors' conferences. A September 1996 conference provided up-to-date environmental information for 45 attendees, as well as a new coordinator training session taught by staff of Keep America Beautiful, Inc. A February 1997 meeting, attended by 27 executive directors, provided professional development training.
- A third conference, held in May 1997, offered training in board development, volunteer management, and fundraising for more than a hundred KAB executive directors and local board chairpersons and members. The program included presentations by the national KAB president, president-elect, and chairman of the national KAB communications committee.
- Keep Georgia Beautiful and P²AD participated in the Metro Atlanta KAB Partnership, which was
 formed to provide a unified voice for solid waste public education in the metro Atlanta area.
 The City of Atlanta, the Atlanta Regional Commission, and various corporations also support
 the Partnership, which spent FY97 organizing and planning activities for the upcoming year.
- Fayette County and Valdosta/Lowndes County joined the KAB system by completing pre-certification training in February 1997.
- In March 1997, at an awards luncheon funded entirely by corporate sponsors, Keep Georgia Beautiful recognized 52 organizations and five individuals for outstanding recycling, composting, and environmental improvement efforts. For the first time, the annual awards program featured a \$1,000 scholarship from the Keep Georgia Beautiful Foundation for the Student of the Year.



THE CHIPPER
COLLECTED MORE THAN
300,000 CHRISTMAS TREES
IN 1997.

RAISE AWARENESS OF PROPER SOLID WASTE MANAGEMENT PRACTICES AMONG GEORGIA RESIDENTS THROUGH MASS MEDIA CAMPAIGNS.

OFFER TRAINING,
TECHNICAL ASSISTANCE,
AND INFORMATION TO
ASSIST LOCAL
GOVERNMENTS AND
OTHER ORGANIZATIONS AS
THEY IMPLEMENT WASTE
REDUCTION PROGRAMS.

- Georgia's Peachy Clean Team continued its "Let's Keep Georgia Peachy Clean" campaign, in which three public service announcements focused on changing behaviors and attitudes about littering. The first spot, filmed in an urban setting, encouraged residents to show pride in the state by not littering. The second, featuring Georgia media personality LeRoy Powell, reminded viewers they probably would not litter "if their Mama was watchin'." The third spot featured heavyweight boxing champion Evander Holyfield at "Camp Evander," teaching children not to litter. The spots aired on cable stations throughout Georgia in purchased and contributed time slots. Additionally, the Georgia Association of Broadcasters selected the campaign to receive donated airtime on its network of 217 radio stations and 25 television stations in Georgia. The donated ads were supplemented with paid time slots. Corresponding posters and print advertisements reinforced the Peachy Clean message.
- For the second year, many of Georgia's mayors and county commissioners recorded public service announcements with litter and waste reduction messages for their local radio stations. The messages encouraged people not to litter, reminding them of the yard trimmings ban, and promoting waste reduction and buying recycled products. DCA provided a recording technician and scripts at meetings of the municipal and county associations. Portions recorded by participating local officials were then combined with portions recorded by a professional announcer. The resulting localized PSAs were distributed to appropriate media outlets.
- DCA's waste management staff provided ongoing technical assistance to Georgia's local governments during FY97. Focal areas included local and regional recycling and education programs, yard trimmings management, and variable rate collection systems.
- A January Pay-As-You-Throw Workshop, held in Athens, was organized by the International City/County Managers Association and the US Environmental Protection Agency. The workshop offered 130 participants—about 85 from Georgia—lessons in setting up and maintaining a variable rate solid waste collection program. DCA assisted with workshop promotion and planning.
- DCA prepared a list of Georgia communities with pay-as-you-throw programs as well as a short
 case study on each. The list was regularly provided to communities interested in implementing
 similar programs. DCA staff also assisted communities already in the process of implementing
 pay-as-you-throw programs. For example, in assisting Montgomery County with a weight-based
 rate program, staff met with county officials; provided information; facilitated a conference call
 with a national expert and a Georgia recycling coordinator with a similar program; and prepared
 a press release to announce program implementation.
- DCA staff also visited with solid waste management staff and local elected officials in the City of Hartwell and the City of Covington/Newton County to provide general recycling and pay-as-youthrow assistance.
- To encourage regional recycling, DCA staff facilitated communication and provided information for Clayton, Spalding, and Monroe counties.
- Two Recycling Program Development Training workshops in May and June were attended by 80 recycling coordinators from local governments, military bases, colleges and universities, and private companies. Each workshop offered training for both beginning and experienced coordinators. DCA and the Georgia Recycling Coalition served as primary sponsors. (See the case study on page 21.)
- Prior to the September 1996 ban on yard trimmings from most MSW landfills, DCA prepared an
 informational packet, including a summary of the law's requirements and a sample local
 ordinance. After the packet was distributed to all local governments, DCA responded by phone,
 fax, or mail to more than 200 local government requests for yard trimmings management
 assistance. DCA also prepared and distributed a *Tools for More Effective Local Government*publication on managing yard trimmings.

- DCA staff and representatives of the University of Georgia's Cooperative Extension Service
 consulted with Fort Benning on yard trimmings management issues including proper site
 selection and preparation for composting of yard trimmings. As a result, Fort Benning began
 an innovative program of composting paper that no longer had a recycling market along with
 the base's yard trimmings.
- In the fall of 1996, DCA published the first issue of its quarterly waste reduction newsletter, The
 Waste Stream Journal. The newsletter supplies news and ideas on waste reduction, waste
 minimization, and litter abatement. It informs more than 2,000 local government officials,
 recycling coordinators, and businesses and individuals of the solid waste management programs
 and training opportunities offered by the State.

PROVIDE TECHNICAL
ASSISTANCE FOR
GENERAL SOLID WASTE
MANAGEMENT ISSUES
FACED BY LOCAL
GOVERNMENTS.

- DCA's waste management staff also provided ongoing technical assistance to local governments in their overall solid waste management efforts, including full-cost accounting, solid waste related ordinances and contracts, and disposal options.
- DCA staff assisted with ordinance preparation for two local governments during FY97, including a yard trimmings disposal ordinance for the City of Covington and revision of an existing ordinance on litter, illegal dumping, and trash collection for White County.
- DCA staff worked with several local governments as they explored new solid waste disposal options. In White County, information was provided to local officials who were considering allowing a private company to operate a newly constructed, county-owned transfer station. In Worth County, officials had decided not to build a new landfill upon closure of the existing landfill. Staff provided information on other disposal options. DCA also assisted Atkinson County, where the local government was experiencing financial difficulties due to its costly Subtitle D landfill operations. Staff prepared budgets, developed a procurement system, and explored new ways of collecting accounts payable to help the County.
- In June 1997, DCA began a series of workshops to help local governments and RDCs begin
 preparing updates to the short term work programs of their solid waste plans. The first
 workshop, held in Valdosta, reached RDC planning directors and staff from the southern half
 of the state.

TRAIN AND OFFER SUPPORT TO GEORGIA'S TEACHERS AS THEY EDUCATE THE STATE'S YOUTH ON ENVIRONMENTAL ISSUES.

- As a sponsor of KAB's Waste in Place and Waste: A Hidden Resource curricula, DCA's Keep Georgia Beautiful program schedules, publicizes, coordinates, and funds teacher training workshops throughout the state. During the 1997 fiscal year, DCA provided training and curriculum guides to 176 classroom teachers, educational specialists, and administrators who have in turn taught an estimated 7,040 students.
- DCA began publishing a semi-annual newsletter for teachers
 who had successfully completed training in either KAB
 curriculum. The newsletter offers resources and ideas for
 teaching about the environment, particularly waste reduction
 and litter issues. It also provides notices of Keep Georgia
 Beautiful programs and a calendar of events related to solid
 waste management. About 400 teachers receive the
 educational updates.

TECHNICAL ASSISTANCE: RECYCLING PROGRAM DEVELOPMENT TRAINING

In its role as a technical assistance provider to local governments, DCA sponsored two recycling program development training workshops in 1997. About 80 recycling coordinators and local government representatives attended sessions in Tifton and Athens during May and June of last year.

Each session offered two tracks, one for participants seeking to begin a program and one for participants with established programs. The beginning track offered seminar topics on setting objectives, targeting materials, setting up collection systems, and finding markets for recovered materials. The more advanced participants received information on challenges to existing programs, processing, writing contracts and ordinances, and other topics of interest.

The two groups came together to hear presentations on topics of general interest, including public education and environmental regulation. This allowed individuals who were just setting up programs to network and learn from experienced recycling coordinators.

In addition to the information presented in the workshops, participants received training manuals with extensive information on each subject covered and other topics not discussed in the training. Participants also received copies of the Recycling Markets Directory and the Recycling Coordinators Directory for the state.

1997 Solid Waste Management Annual Report

SUPPORT RECYCLING MARKET DEVELOPMENT BY ENCOURAGING BUSINESSES AND GOVERNMENT AGENCIES TO PURCHASE PRODUCTS MADE FROM RECYCLED MATERIALS AND BY PROMOTING INVESTMENT IN GEORGIA RECYCLING COMPANIES.

MINIMIZE THE GROWING WASTE STREAM GENERATED BY GEORGIA'S THRIVING ECONOMY WITH PROGRAMS AIMED AT BUSINESSES AND INDUSTRIES.

- After producing a successful Buy Recycled Conference and Exposition in FY96, representatives
 from State and federal agencies, the Georgia Recycling Coalition, and several private companies
 continued seeking ways to promote recycled product procurement in Georgia. The Buy Recycled
 Committee includes: DCA, EPD, P²AD, GEFA, the Georgia Building Authority (GBA), the Georgia
 Department of Administrative Services (DOAS), the US General Services Administration, US
 Environmental Protection Agency Region 4 (EPA), the Georgia Recycling Coalition, The CocaCola Company, Rock-Tenn Company, and the Southern Company.
- With the nonprofit Georgia Recycling Coalition as the lead applicant, the State agency members of the Buy Recycled Committee applied for and received a \$50,000 grant from EPA to host a Buy Recycled Conference and Exposition in Georgia. While most of the planning occurred during FY97, the conference was held in the first quarter of FY98.
- The Buy Recycled Committee also supported a one-day Buy Recycled Workshop sponsored by the US Conference of Mayors and EPA during November 1997.
- DCA promoted the Southeast Recycling Investment Forum held in Charleston, S.C., in February 1997. Three Georgia companies attended the forum to present their business plans to potential investors. The Forum provided the companies training and investment contacts for expanding their operations. It also educated investors from the region about money-making opportunities in the recycling industry.
- P²AD provides waste reduction technical assistance to Georgia businesses, industry, and institutions. Staff engineers and technical experts respond to requests with information from the division's library or from other outside sources, including the World Wide Web. Where more extensive help is desired by the business, a staff engineer or a team of engineers assesses a company's waste streams and identifies costs and benefits of various waste reduction and recycling options. In FY97, P²AD responded to 567 requests for technical assistance, with the majority coming from businesses and industry (45%), consultants (19%), and government (18%).
- P²AD sponsored pollution prevention workshops during the year for printers, metal finishers, wood furniture manufacturers, and the carpet industry. P²AD also gave general pollution prevention and waste reduction education to businesses and governments by providing speakers for 66 different events and workshops.
- DCA and P²AD worked with local representatives to conduct a Waste in the Workplace workshop
 in Rome in January 1997. The morning-long seminar focused on waste reduction and buy
 recycled activities. Company representatives learned to conduct waste audits at their businesses
 and were introduced to recycling resources in their community.
- During FY97, P²AD and several partners were awarded an EPA Jobs Through Recycling (JTR) grant to conduct an 18-month demonstration project to establish a sustainable industrial recycling network within the City of Atlanta. This project will serve as a model for establishing similar networks throughout the state. The project will match up available industrial by-products with industrial feedstock needs. JTR partners are P²AD; DCA; the Georgia Department of Industry, Trade, and Tourism; Georgia Tech's Economic Development Institute (EDI); and the University of Georgia's Biological and Agricultural Engineering Department.
- During FY97, P²AD and EDI initiated a series of regional environmental networks around the state. These networks are geographically based from 12 EDI field offices and meet several times a year to discuss environmental issues of interest to the businesses in that area. These networks will eventually be used to set up regional recycling and reuse opportunities in cooperation with State and local governments, local businesses, the manufacturing industry, and Department of Defense facilities.

- In its quarterly newsletter *From the Source*, P²AD publishes program announcements, case studies, pollution prevention informational articles, and a list of upcoming events. The newsletter is circulated to over 5,300 persons. Recipients include manufacturing industry representatives, government officials, businesses, and citizens.
- While Georgia hosted the world for the Centennial Olympic Games, the Georgia Hospitality Environmental Partnership (GHEP) assisted the hospitality industry in minimizing the solid waste generated by the influx of visitors. GHEP, DCA's resource management program for Georgia's hospitality and travel industry, continued to work with its pilot waste reduction program at the Westin Peachtree Plaza in downtown Atlanta. The program generated a \$1,300 monthly benefit to the hotel while consistently diverting up to 20% of the hotel's waste from landfills. During FY97, GHEP assisted 11 hotel properties in metro Atlanta, one on St. Simon's Island, one on Jekyll Island, and one in Augusta-Richmond County. Additionally, GHEP staff gave presentations to two Atlanta hospitality groups, the American Hotel & Motel Association annual conference, and an EPA Region 4 Indian Nations solid waste workshop. GHEP partners include EPA, Region 4; UGA Cooperative Extension Service; Georgia Hospitality & Travel Association; DCA; Keep Georgia Beautiful; EPD; P²AD; Department Of Industry, Trade And Tourism; GEFA; Atlanta Convention and Visitors Bureau; Metro Atlanta Chamber Of Commerce; and the City Of Atlanta, Solid Waste Services.

LEAD BY EXAMPLE IN RECYCLING AND RECYCLED PRODUCT PROCUREMENT PROGRAMS.

- The Comprehensive Solid Waste Management Act requires State agencies to set up recycling programs in State-owned buildings {O.C.G.A. § 12-8-36}. The program illustrates State government's commitment to recycling and serves as an example for other levels of government and private companies. GBA, coordinator of the effort, reported recycling 4,384 tons of recyclables in the 1997 fiscal year. The program recycles four grades of paper (99% of materials recycled) and aluminum cans. Recyclables are collected from State agencies in 120 facilities within a 30-mile radius of the State Capitol, as well as from selected facilities in Athens, Augusta, Carrollton, Dahlonega, Macon, and Milledgeville.
- DOAS reports that State government spent \$8,864,208 on recycled content products in FY97.
 Although the dollars spent on DOAS contracts for recycled office paper fell from the previous fiscal year, agencies increased their purchases of recycled tissue paper, retreaded tires, compost and mulch, and plastic lumber products. The agency hopes that recent updates to the recycled paper mandate will boost the recycled paper purchases once again.
- State law in 1997 required that all state agencies purchase an annual aggregate of 50% recycled fibers in all printing and writing papers. That means that agencies were able to buy printing and writing papers with varying recycled fiber contents, but at the end of the fiscal year, 50% of the paper fibers had to be recycled fiber. Although this was a challenging goal, 18 agencies met the 50% requirement. DOAS recognized those agencies by mailing certificates to the purchasing offices and by listing the agencies in statewide publications.
- DOAS reported several advances in the procurement of recycled and environmentally-preferable products by State agencies during FY97. DOAS' Surplus and Supply improved the number and quality of remanufactured toner cartridges they make available to State agencies. State Purchasing developed model contract terms and conditions for agencies to use in securing fluorescent lamp and ballast recycling services. State Purchasing also distributed its Georgia Vendor Manual to all of the State's registered vendors via the Internet and 25,000 remanufactured diskettes. DOAS staff educated State agency purchasers on the purchase of recycled products at two presentations during FY97. Regular editions of Recycled Product Purchasing Quarterly, which cites general and technical information about resource efficient products, were sent to State procurement offices. DOAS also included articles about State agency recycled product purchasing efforts in Info-line, a publication sent to all State agency heads.

P²AD TECHNICAL ASSISTANCE: CORNERSTONE MFG.

Reducing the waste they generate is a primary way that companies can decrease their expenses and help the environment at the same time. With help from P²AD, Cornerstone Manufacturing of Sycamore did just that.

Cornerstone produces fireplace fronts, hearths, and wood mantles for the manufactured home industry. The finishing process for the mantles includes an application of a wood sealer. The sealer was being purchased in five-gallon pails, from which the mantles were spray coated. Daily sealer usage averaged 32.5 gallons per day, representing 6.5 supply changes. This operation generated 1,625 five-gallon empty steel pails annually. The empty pails were sent to a landfill with other solid waste.

Cornerstone purchased and installed equipment to mix and spray the sealer from 55 gallon drums. Purchasing the sealer in bulk reduced the price by 30 cents per gallon, and the supplier agreed to take back the drums for reuse at no cost. Installation of the new equipment cost \$1,800. This change will reduce the company's solid waste stream annually by 40.23 cubic yards and will save the company approximately \$5,088 per year in waste management fees, material costs, and labor.

LOOKING TO THE FUTURE

Several important issues are expected to affect Georgia's system of solid waste management in the coming years. They fall under the categories of planning, research, public education, funding, and environmental regulations.

PLANNING

The Board of Community Affairs and the Board of Natural Resources adopted a new Georgia Solid Waste Management Plan in the fall of 1997. The new plan, which was the first revision of the 1990 plan, reflects lessons learned during the previous seven years as it guides SWM efforts over the next five years. Three major shifts in direction form its basis: the evolving role of local governments in the SWM field and the resultant changing need for State assistance; the State's expanding ability to work with the commercial and industrial sectors on waste reduction; and improved methods for monitoring, reporting, and tracking waste reduction progress.

Just as the State revisited its plan, local governments will be taking a second look at their plans in FY98 and FY99. As they update their short term work programs, they will reevaluate their priorities based on accomplishments to date; changes in solid waste facility ownership and location; the economic aspects of solid waste management; and shifts in local policies.

As part of the renewed emphasis on planning, DCA initiated an annual award to recognize exemplary local government solid waste planning and plan implementation. The first award was presented in March 1998 to Hall County and the cities of Clermont, Gainesville, Gillsville, Oakwood, and Flowery Branch. DCA hopes the award will encourage excellence in maintaining and executing local government solid waste management plans in the future.

RESEARCH

Additional planning will be fueled by research expected to be complete during FY99. P²AD used a 1996 survey of landfill operators to identify five significant non-residential solid waste streams: wood waste, construction and demolition waste, food processing waste, textile fibrous waste, and municipal biosolids. With assistance from the University of Georgia (UGA), P²AD is conducting a characterization of each of the waste streams, except for municipal biosolids, which will be initiated during FY99. The full reports will identify generation trends, current management options, impediments to recycling/reduction, and market availability. P²AD will use the information to assess areas where markets do not exist or need expanding and to identify technology voids for certain materials. The first report will address wood waste and will be issued in the fall of 1998.

Another area of research will seek to increase agricultural utilization of municipal, industrial, and agricultural by-products. P²AD's recycling market development efforts and solid waste pollution prevention efforts will be closely coordinated with the activities of the UGA's Centers for Bioconversion and By-Product Utilization. These centers seek to develop value-added products from wastes that can be used as industrial feedstocks or soil amendments.

PUBLIC EDUCATION

Georgia's state affiliate of Keep America Beautiful, Inc., Georgia Clean and Beautiful, changed its name to Keep Georgia Beautiful during FY98. The 1990 Georgia Comprehensive Solid Waste Management Act gave DCA responsibility for educating the public on solid waste issues. As a program of DCA, Keep Georgia Beautiful is the primary vehicle for fulfilling that requirement. Along with the name change came a new mission statement:

It is the mission of Keep Georgia Beautiful to build and sustain community environmental activities and behaviors that will result in a more beautiful Georgia.

Keep Georgia Beautiful also unveiled a new logo and during the remainder of 1998 will celebrate its 20^{th} year.

Two new DCA-sponsored initiatives to educate the general public will also appear in future reports of State solid waste management efforts. The first Georgia Recycles Day was held in conjunction with America Recycles Day on November 15, 1997. Citizens from around the state participated in locally organized Recycles Day events, resulting in more than 10,200 pledges to recycle more and increase purchases of recycled products. About 240 local governments, communities, and civic organizations participated in the first event. Georgia Recycles Day will be celebrated annually on November 15. DCA has contracted with the Georgia Recycling Coalition to coordinate the 1998 event.

The second new initiative is a mass media campaign promoting waste reduction among Georgia residents. Expected to get underway during FY99, the campaign will be funded by the State's Solid Waste Trust Fund. It will be DCA's largest attempt to reach Georgia residents directly since the Department was given responsibility for public education.

FUNDING FOR SOLID WASTE MANAGEMENT

Most of the State's solid waste management efforts are funded by the Solid Waste Trust Fund. Managed by EPD, this fund is financed by a \$1 fee paid at the time of purchase of any new tire bought in Georgia. It generates approximately \$6 million annually.

During the 1997 session of the General Assembly, conflicting bills were introduced, one to end prematurely the dollar fee and the other to extend collection of the fee past its current sunset date of June 30, 2000. The need for the fee was debated because EPD has largely completed the task of cleaning up large scrap tire piles in the state, one of the primary purposes for establishing the Fund.

In 1998, the House of Representatives passed a resolution to give direction until a conclusion is reached. The resolution directed EPD and P²AD to research topics such as economically feasible ways of recycling high volumes of tires and economic incentives for reusing or recycling tires. As a result, EPD and P²AD contracted with Georgia State University to write a report on options for recycling and reusing tires, as well as ways of controlling and funding scrap tire recycling and disposal. According to the House Resolution, conclusions of this study will be used to determine, before the scheduled sunset date, whether or not the fee should continue and, if so, how it should be used.

In the absence of this funding source for solid waste management grants and activities, other sources will have to be identified to continue current levels of service provided by the agencies.

DEALING WITH LANDFILL CLOSURE AND CONTAMINATION: ATHENS-CLARKE COUNTY

Many local governments are learning that closing a landfill can be as expensive as constructing and operating one because it often involves solving groundwater contamination and methane gas problems. For example, in 1997, Athens-Clarke County (ACC) faced closing a landfill with a plume of contaminated groundwater spreading to residential areas—and a community of angry citizens to go along with it

After the contamination problem was identified, ACC attempted to increase the buffer zone and purchase the affected land. Property owners resisted, though, despite offers well above fair market value. Residents felt the problem could be solved by installing a water-resistant cap (problems were most severe after heavy rainfall) and increasing groundwater and sub-soil monitoring.

DCA funded the services of a facilitator to assist citizens in articulating their concerns and to mediate during the negotiation process. A technical advisor was also hired to provide the affected citizens with a better understanding of the situation and to submit a report to EPD regarding possible contamination risks, independent of a report filed on behalf of ACC.

The citizens' advisor suggested that ACC monitor the plume on an ongoing basis and acquire properties only if a clearly defined health risk arose. The citizens' advisor and ACC's advisor agreed that there was no current health risk. With approval from EPD, however, ACC went ahead with the property acquisition to curtail potential health risks and the associated liability.

ACC acquired 10 parcels of land and began corrective measures include intrinsic remediation and bioremediation for plume management, clay capping, and installation of a gas collection and treatment system. The estimated cost for ACC's closure and corrective measures is in excess of \$10 million.

REPERCUSSIONS OF LANDFILL REGULATIONS

Four regulatory issues may greatly impact the number of landfills in the state and the cost to owners of both operational and closed landfills:

- The number of unlined MSWLs will decrease dramatically in FY98 because of a 1993 statute that requires vertically expanded, unlined landfills to cease accepting waste by July 1, 1998. Fifteen of the 56 unlined landfills (or 27%) will be affected. Though the closures will have limited impact on overall capacity, they may leave some local governments scrambling for resources to haul their waste further.
- Growth in the number of inert landfills is expected to slow in FY98 because of a new EPD rule that limits the number of inert landfills in new developments by requiring a 100-foot buffer zone between buried waste and any property line or enclosed structures. The new rule went into effect in August 1997.
- The methane gas produced by landfills as wastes slowly decompose within them
 is a problem that does not disappear when a landfill closes. The gas can build
 up within landfills and migrate through the soil. Landfill gas migration can lead
 to explosive concentrations of gas in basements, sewer manholes, and other
 buried structures, and it can contribute to groundwater contamination.

EPD rules require landfill operators to monitor levels of methane gas. If the level of gas exceeds 5% by volume (the lower explosive limit [LEL] for methane) in soils at the facility property boundary, the facility is considered to be out of compliance. In those cases, the owners must demonstrate that methane is not migrating beyond the property boundary. If such a demonstration cannot be made, the owners must remediate the gas migration by purchasing the affected land and containing the plume; intercepting the migration with a low permeability trench; drilling vents in the landfill to allow escape of the gas into the atmosphere; or installing extraction wells to actively remove gas from the landfill. All of these options are expensive, particularly for owners of closed landfills, which no longer have a revenue source. Remedial measures must also be conducted if methane exceeds 5% of the LEL in facility structures.

In 1997, 78 landfills reported methane exceedances at compliance boundaries and/or structures, and actions to lower methane levels were underway at 54 of the contaminated sites.

• Georgia MSWL operators must provide and maintain systems to monitor levels of chemicals released into the groundwater. Though the costs vary greatly depending on the size of the landfill, owners incur costs ranging from \$6,000 to \$40,000 per year to analyze groundwater samples and report the resulting data. This is in addition to the initial installation cost, which can range from \$50,000 to \$150,000. If the groundwater has been impacted by the landfill, the landfill owner must cover costs to determine the nature and extent of contamination; determine the appropriate corrective measures; select a remedy; and implement the remedy.

As of July 1997, no municipal landfills in Georgia had cleaned up contaminated groundwater under State rules (some problems regulated under the federal Superfund have been addressed). EPD estimates that returning MSWLs to compliance status will cost \$250,000 to \$1 million per site. This includes the cost of groundwater cleanup, provision of potable water supply, and continued monitoring.

An issue paper prepared for EPD in 1997 summarizes the resulting problems for many of Georgia's local governments:

Counties and cities across the State of Georgia operated landfills for many years as a service to the residents in their jurisdictions. The landfills seldom provided enough revenue to cover the expense of operating a site with today's environmental monitoring and financial responsibility requirements. The counties and cities that have operated the landfills now face closure of the unlined facilities, and therefore a reduction in revenue will follow. Many of the owners across the State of Georgia now must finance expensive groundwater investigation and cleanup activities. Although the [Hazardous Site Response Act] program of the EPD has delegated dollars for assisting with the expenses incurred addressing contaminated groundwater, the available money will not be sufficient to relieve the financial hardships created by the landfills.

At the end of 1997, 206 landfills had approved groundwater monitoring systems (this includes active and closed facilities). Of these, 91 landfills had found contamination and were performing groundwater assessments.

hile the State is making progress in the areas of planning, public education, and environmental regulations, future efforts could be hindered if funding sources are not sustained or created to finance current and future efforts.

Further, the growing realization that all aspects of environmental management are intertwined (consider the impact landfills have on both groundwater and air quality, for example) suggests that State policy makers and agencies should widen their focus. Rather than treating seemingly separate environmental problems as isolated areas, their interdependence should be recognized. Efforts in all areas of environmental management, regulation and education must work together to minimize the impact of human activities on the environment.

APPENDIX A: GOVERNMENTS NOT IN COMPLIANCE WITH THE SWM ACT

LOCAL GOVERNMENTS NOT SUBMITTING SOLID WASTE MANAGEMENT PLANS

City of Cumming

City of Georgetown

City of Grantville

City of Greenville

City of Haralson

City of Jasper

City of Lithia Springs

City of Lone Oak

City of Moreland

City of Nelson

City of Offerman

City of Pine Lake

City of Sharpsburg

City of Talking Rock

City of Turin

Pickens County

LOCAL GOVERNMENTS NOT RESPONDING TO 1997 SOLID WASTE SURVEY AND FULL COST REPORT

City of Buena Vista

City of Concord

City of Corinth

City of Damascus

City of Enigma

City of Ludowici

City of Nelson

City of Pavo

City of Rest Haven

City of Summertown

City of Toomsboro

APPENDIX B: REMAINING LANDFILL CAPACITY

		FY97	Remaining	Estimated
Facility	County	Tons	Capacity (Yds ³)	Closure Date
Appling Co-Roaring Creek PH 1&2 (SL)	Appling	12,901	73,832	8/1/99
Atkinson Co-SR 50 (MSWL)	Atkinson	6,462	NR	NR
Central State Hospital-Freeman Bldg (L)	Baldwin	326	55,384	8/21/58
Baldwin Co-Union Hill Ch Rd, PH 3 (MSWL)	Baldwin	27,590	3,189,000	12/30/56
Chambers R&B Landfill, Inc. (SL)	Banks	79,736	27,925	11/1/97
Republic Waste-Oak Grove (MSWL) SR324	Barrow	376,837	3,883,407	1/1/03
Bartow Co-SR 294 Emerson (SL) PH 1 (C&D)	Bartow	11,814	252,000	1/1/07
Bartow Co-SR 294 Emerson (MSWL) PH 2	Bartow	98,764	408,000	4/1/00
Fitzgerald, Kiochee Church Rd, PH 2 (SL)	Ben Hill	28,152	791,334	3/1/12
Macon-Walker Rd PH 2 (SL)	Bibb	94,052	2,250,000	6/20/07
Swift Creek Landfill (L)	Bibb	67,876	784,861	10/15/02
Swift Creek MSW Landfill (SL)	Bibb	75,658	3,973,055	4/26/20
Statesboro-Lakeview Rd (SL)	Bulloch	91,963	0	In-closure
Burke Co-Clarke Rd (SL)	Burke	17,762	68,174	7/1/99
Butts Co-Brownlee Rd (SL)	Butts	10,739	0	In-closure
Butts Co-Pine Ridge Recycling (MSWL)	Butts	24,149	NR	NR
Camden Co-SR 110 (MSWL)	Camden	60,049	3,224,223	5/1/21
Candler Co-SR 121 Phase 2 (C&D)	Candler	21,002	12,334	9/30/97
Candler Co-SR 121 Phase 2 (MSWL)	Candler	8,479	580,577	4/9/28
Carrollton-SR 166 (SL)	Carroll	91	0	In-closure
Catoosa Co-SR 151 W Exp (SL)	Catoosa	118,956	358,156	6/30/98
Charlton Co-Chesser Island Rd (SL)	Charlton	30,104	122,017	4/1/99
Superior Sanitation, Little Neck Rd, PH 2 (MSWL)	Chatham	352,644	7,926,465	1/1/14
Savannah-Dean Forest Rd (SL)	Chatham	74,613	1,175,065	10/20/04
Clifton Equipment Rental Company, Inc. (L)	Chatham	69,597	234,655	7/1/98
Chatham Co-Thomas Ave (L)	Chatham	15,361	23,400	7/1/98
Chatham Co-Sharon Park (L)	Chatham	6,207	4,050	4/1/98
Chatham Co-Chevis Rd (L)	Chatham	4,810	4,500	4/1/98
Ft. Benning - 1st Division Rd. (SL)	Chattahoochee	19,433	12,000	10/31/97
Cherokee Co-Sanifill/Pine Bluff Landfill, Inc. (SL)	Cherokee	278,333	41,364,400	5/1/56
Cherokee Co-Swims-SR 92 PH 4 (L)	Cherokee	75,919	58,000	7/1/98
Clarke Co-Dunlap Rd (SL) PH 2,3, & 4	Clarke	58,126	2,362,572	12/31/07
Clarke Co-Dunlap Rd (SL), PH 1	Clarke	42,608	0	In-closure
Clayton Co-SR 3 Lovejoy Site # 3 (SL)	Clayton	89,134	4,563,994	1/29/23
Chambers-Oakdale Rd/I-285 (L)	Cobb	111,839	179,060	12/1/97
Cobb Co-County Farm Rd #2 Phs 1-2-3 (L)	Cobb	36,467	137,154	5/17/99
Cobb Co-Cheatham Rd PH 2 (SL)	Cobb	4,920	8,639	6/30/98
Coffee Co-CR 129/17 Mile River (SL)	Coffee	58,472	11,750	7/1/98
Columbia Co-Baker Place Rd (SL), PH 2	Columbia	62,610	940,739	2/10/05
Cook Co-Taylor Rd Adel PH 1 (SL)	Cook	20,675*	150,000	7/1/98
Cook Co-Taylor Rd Adel (L)	Cook	.,	197,762	1/1/58

1997 Solid Waste Management Annual Report

		FY97	Remaining	Estimated
Facility	County	Tons	Capacity (Yds³)	Closure Date
Cordele-US 41 S PH 2 (SL)	Crisp	118,448	119,407	2/12/98
Dawson Co-Shoal Hole Rd (SL)	Dawson	9,290	123,918	5/1/03
Decatur Co-SR 309 Bainbridge PH 2 (SL)	Decatur	24,750	431,612	3/1/06
APAC/GA-Donzi Ln PH 5a & 5b (L)	DeKalb	509,934	2,972,900	10/1/03
Land Reclamation-Rogers Lake Rd (C&D)	DeKalb	99,976	1,080,607	1/1/05
DeKalb Co-Seminole Rd PH 2 (SL)	DeKalb	137,777	562,218	7/1/03
WMI-Live Oak #2 (SL)	DeKalb	1,228,424	5,919,250	10/1/00
BFI-Hickory Ridge (MSWL)	DeKalb	392,522	5,139,240	8/1/05
DeKalb Co-East DeKalb Scales Rd (C&D)	DeKalb	69,064	4,125,373	7/1/40
Phillips-Scales Rd C&D (L)	DeKalb	122,466	80,687	7/1/02
Dodge Co-CR 274 (Dodge Ave) Eastman (SL)	Dodge	11,726	38,961	7/1/98
Dooly Co-CR 101 (SL)	Dooly	8,504	110,062	7/1/98
Dougherty Co-Fleming/Gaissert Rd (SL)	Dougherty	164,541	228,750	7/1/98
Maple Hill Landfill, Inc. (L)	Dougherty	53,299	140,718	2/1/99
Douglas Co-Cedar Mt/Worthan Rd PH 1 (SL)	Douglas	39,275	NR	NR
Effingham Co-SR 17 Guyton (SL)	Effingham	10,282	51,290	7/1/98
Elbert Co Hull Chapel Rd PH 1 (SL)	Elbert	16,169	90,057	6/1/00
Emanuel Co-SR 297 Swainsboro (SL)	Emanuel	16,096	9,047	7/1/98
Evans Co-Sikes Branch Claxton (L)	Evans	3,495	93,260	11/1/10
Fayette Co-1st Manassas Mile Rd Nside (L)	Fayette	28,901	36,932	10/14/97
Floyd Co-Berry Hill Rd (SL)	Floyd	115,575	752,640	7/1/98
Forsyth Co-Hightower Rd PH 4 (MSWL)	Forsyth	18,313	0	In-closure
Franklin Co-Harrison Bridge Rd PH 1 (SL)	Franklin	15,132	343,883	1/17/10
Atlanta-Key Rd (SL)	Fulton	127	289,231	8/29/99
Atlanta-Confederate Ave (L)	Fulton	78	13,862	9/8/39
Atlanta-Cascade Rd (SL)	Fulton	58	12,681	4/3/17
Chambers-Bolton Rd (SL)	Fulton	222,687	251,699	3/1/98
Atlanta-Gun Club Rd (SL)	Fulton	157	33,750	1/11/38
Chadwick Rd Landfill, Inc. (L)	Fulton	230,012	4,481,863	3/1/03
Eller-Whitlock Ave (L)	Glynn	20,740	11,386	3/1/98
Glynn Co-Cate Rd (L)	Glynn	4,824	92,252	10/1/97
Glynn Co-Cate Rd (SL)	Glynn	22,191	262,925	10/1/97
Gordon Co-Redbone Ridges Rd (SL)	Gordon	55,495	10,284,129	6/30/79
Cairo-6th Ave (SL)	Grady	14,984	286,650	5/1/06
WMI-B J Landfill PH 3 &4 (SL)	Gwinnett	30,504	85,827	2/15/99
Button Gwinnett-Arnold Rd PH 3 (SL)	Gwinnett	3,842	171,273	6/1/19
Uwl Inc-Richland Creek Rd (SL)	Gwinnett	625,509	13,863,096	2/1/11
Habersham Co- SR134 (MSWL)	Habersham	23,189	1,198,320	1/1/32
Hall Co-Allen Creek PH A (SL)	Hall	57,228	21,375	9/7/97
Reliable Tire Service, Monroe Dr. (C&D)	Hall	115,683	2,990,050	9/1/16
Haralson Co-US 78 Bremen PH 2 (SL)	Haralson	44,561	72,556	12/1/98
Houston Co - SR 247 Klondike (SL)	Houston	128,620	6,397,200	7/21/25
Jasper Co-SR 212 Monticello (SL)	Jasper	4,974	50,075	11/1/01
Jeff Davis Co-CR 20 (L)	Jeff Davis	3,539	66,581	8/1/09

		FY97	Remaining	Estimated
Facility	County	Tons	Capacity (Yds³)	Closure Date
Jeff Davis Co-CR 20 (SL)	Jeff Davis	6,585	14,850	7/1/98
Jefferson Co-US 1 (Avera Rd) (SL)	Jefferson	16,735	15,926	4/1/98
Jenkins Co-Cr54 Phase 2 MSWL & C&D Site (SL)	Jenkins	8,176	1,148,396	7/1/73
Jenkins Co-CR 54 (SL)	Jenkins	3,067	0	In-closure
Lamar Co-Grve St Ext (Old Mlnr Rd) (SL)	Lamar	82,082	294,593	7/1/98
Laurens Co-Old Macon Road (MSWL)	Laurens	41,341	335,363	10/16/03
US Army-Ft Stewart Main Cantonment (L)	Liberty	4,189	18,750	5/1/99
Liberty Co-Limerick Rd (L)	Liberty	8,674	7,955	7/1/98
US Army-Ft Stewart Main Cantonment (SL)	Liberty	23,558	1,050,515	1/1/18
Valdosta-Wetherington Lane (SL)	Lowndes	29,892	117,291	7/1/98
Pecan Row Municipal Solid Waste Landfill (MSWL)	Lowndes	248,788	2,943,276	4/5/06
Lumpkin Co-Barlow Homes Rd PH 2 (SL)	Lumpkin	8,126	7,364	1/1/98
Macon Co-SR 49 N #3 (SL)	Macon	16,486	0	In-closure
McIntosh Co-King Rd (SL)	McIntosh	8,754	988,667	1/1/63
Meriwether Co-CR 98 Durand (SL)	Meriwether	18,545	20,100	1/15/98
Mitchell Co-SR 3a (SL)	Mitchell	12,504	0	In-closure
Monroe Co-Strickland Loop Rd (SL)	Monroe	18,602	2,464,674	6/1/63
Murray Co-US 411 Westside (SL)	Murray	31,456	17,740	10/1/97
Columbus-Schatulga Rd W Fill PH 2 (SL)	Muscogee	61,846	202,500	10/10/98
Newton Co-Forest Tower/Lwr Rvr Rds (SL)	Newton	42,895	231,965	8/1/07
Oglethorpe Co-US 78 C/D Landfill (SL)	Oglethorpe	31,024	165,858	1/1/04
Paulding Co-Gulledge Rd N Tract 1 (SL)	Paulding	26,469	9,375	8/15/97
Polk Co-Grady Rd (SL)	Polk	32	0	In-closure
Putnam Co-CR 29 (L) & (SL)	Putnam	33,208	377,042	2/1/03
US Army-Ft Gordon Gibson Rd PH 1-3 (SL)	Richmond	6,324	NR	NR
Richmond Co-Deans Bridge Rd PH 2c (SL)	Richmond	172,431	1,399,596	8/11/01
Spalding Co-Griffin/Shoal Creek Rd PH2 (C&D)	Spalding	12,659	280,080	7/1/08
Stephens Co-SR 145 PH 2&3 (SL)	Stephens	2,555	52,210	9/1/05
Southern States-SR 90/SR 137 Charing (SL)	Taylor	761,936	38,422,168	3/15/26
Telfair Co-S 2316 (SL)	Telfair	9,138	240,225	7/1/98
Thomas Co-Thomasville/Sunset Dr PH 2 (MSWL)	Thomas	102,020	566,426	7/1/98
Tifton-Omega/Eldorado Rd PH 1&3 (SL)	Tift	32,540	767,069	11/1/07
Toombs Co-S 1898 PH 2 Vert. Expansion (SL)	Toombs	36,265	64,687	7/1/98
LaGrange-I 85/SR 109 (SL)	Troup	61,154	109,300	12/30/97
Troup Co-SR 109 Mountville PH 2 (SL)	Troup	4,525	236,525	5/1/29
Twiggs Co-US 80 (SL)	Twiggs	9,611	4,902,526	4/1/68
Lafayette-Coffman Springs Rd (L)	Walker	1,427	74,009	7/1/42
Walker Co-Marble Top Rd Areas 1-5 (SL)	Walker	68,022	0	In-closure
Ware Co-US 82 Waresboro (SL)	Ware	36,680	0	In-closure
Washington Co-Kaolin Rd S #3 (SL)	Washington	13,990	1,597,910	4/1/52
Wayne Co-SR23, Broadhurst (SL)	Wayne	86,820	6,958,254	10/15/53
Treutlen & Wheeler Counties-SR 46 PH 2&3 (SL)	Wheeler	9,554	181,338	7/1/98
White Co-Dukes Creek (SL)	White	7,074	0	In-closure

1997 Solid Waste Management Annual Report

		FY97	Remaining	Estimated
Facility	County	Tons	Capacity (Yds³)	Closure Date
Whitfield Co-Dalton, Old Dixie Hwy, PH 6 (SL)	Whitfield	124,532*	11,212,822	1/1/34
Whitfield Co-Dalton, Old Dixie Hwy PH 5 (SL)	Whitfield		80,000	9/29/97
Whitfield Co-Dalton, Old Dixie Hwy PH 2 (SL)	Whitfield		293,950	9/1/01
Dalton-Rocky Face W PH 2 (SL)	Whitfield	26,143	78,390	3/1/99
Wilkes Co-CR 40 (SL)	Wilkes	15,170	28,401	2/23/98
Worth Co-SR 112 Sylvester PH 1 (SL)	Worth	11,947	0	In-closure

Notes: The parenthetical designations show the type of landfill as permitted by EPD. Both (C&D) and (L) designations indicate construction and demolition landfills, while (MSWL) and (SL) designations indicate municipal solid waste landfills.

NR Site did not report in time for inclusion in the report.

^{*} Tonnage is the combined disposal figure for all phases of a site.

APPENDIX C: GRANTS & LOANS TO LOCAL GOVERNMENTS

LOCAL DEVELOPMENT FUND GRANTS (DCA)

Recipient	Amount (\$)	Purpose
City of Hahira	8,123	Purchase chipping equipment

SOLID WASTE LOAN PROGRAM (GEFA)

Recipient	Amount (\$)	Purpose
Northeast Georgia Regional SWM Authority	368,000	Consolidate paper recycling plant property and debt
City of Tifton	700,000	Construct Subtitle D landfill

SCRAP TIRE MANAGEMENT ENFORCEMENT/EDUCATION GRANTS (EPD)

Recipient A	lmount (\$)	Purpose
Athens-Clarke County	25,000	Scrap Tire Education
Banks County	27,137	Scrap Tire Enforcement and Education
Bartow County	22,522	Scrap Tire Enforcement and Education
Bulloch County	19,963	Scrap Tire Enforcement and Education
Candler County (Keep Southeast Georgia Beautiful)	25,000	Scrap Tire Education
City of Atlanta	75,000	Scrap Tire Enforcement and Education
City of East Point	55,120	Scrap Tire Enforcement and Education
City of Glennville	13,945	Scrap Tire Enforcement and Education
City of Dalton-Whitfield County	37,010	Scrap Tire Enforcement and Education
Dougherty County	25,000	Scrap Tire Education
Douglas County	9,581	Scrap Tire Enforcement and Education
Elbert County	37,679	Scrap Tire Enforcement and Education
Forsyth County	13,489	Scrap Tire Education
Gordon County	35,625	Scrap Tire Enforcement and Education
Johnson County	26,885	Scrap Tire Enforcement and Education
Lincoln County	38,567	Scrap Tire Enforcement and Education
Madison County	24,210	Scrap Tire Enforcement and Education
Monroe County	45,439	Scrap Tire Enforcement and Education
Montgomery County	44,514	Scrap Tire Enforcement and Education
Newton County	67,125	Scrap Tire Enforcement and Education
Polk County	5,500	Scrap Tire Education
Walton County	36,189	Scrap Tire Enforcement and Education
Total	710,500	

WASTE REDUCTION AND RECYCLING GRANTS (GEFA)

Recipient	Amount (\$)	Purpose
Alamo	\$20,000	Purchase tub grinder for mulching yard trimmings and organic material
Aragon	25,000	Purchase baler for processing recyclables and tow motor to handle loads
Ashburn	20,000	Purchase leaf vacuum, wood chipper for composting program
Baldwin County Barnesville	36,000 12,395	Implement food and wood waste composting (Central State Hospital & Prison) Purchase equipment to crush glass and cans
Bartow County	157,000	Add storage area to existing recycling center; construct two additional collection centers for recyclables; purchase shredder; initiate industrial waste reduction program
Brooklet	11,495	Purchase wood chipper to prepare yard trimmings for composting
Brooks County	27,750	Purchase five trailers for pesticide container recycling program
Camden County	7,900	Complete yard trimmings management facility, shade house, nursery pads, waste oil storage area
Candler County	125,000	Consolidate green boxes; construct convenience centers/recycling drop-off centers around county (Metter, Pulaski)
Canton	100,000	Develop recycling, public information, and education program
Dade County	62,082	Construct stationary and portable recycling collection bins in county; establish Keep America Beautiful program; purchase recycling collection equipmen initiate waste oil recovery/storage program (Trenton)
Dooly County	76,500	Construct concrete tipping floor; purchase loader truck and containers for pesticide container recycling program (Adjoining Counties)
Dougherty County	30,950	Conduct home composting education program
Douglas	200,000	Implement biosolids/yard trimmings/agricultural waste composting program
Duluth	9,000	Provide additional compost bins to residents; produce brochure o composting
Edison	20,000	Purchase wood chipper to process storm debris and yard trimmings
Elbert County	200,000	Develop multiple staffed convenience centers with recycling; eliminate gree boxes in county (Bowman)
Floyd County	150,000	Implement regional school central source separation recycling project (Bartov County, Cartersville and Rome)
Forsyth County	80,000	Construct additional staffed recycling drop-off centers
Gay	30,000	Construct community drop-off recycling center and purchase vehicle
Gordon County	70,000	Implement volume-based rate system for MSW/recycling at six compacto sites as incentive for recycling by residents
Gwinnett County	50,000	Expand Recycling Bank of Gwinnett; add sorting line conveyor and baler, 10,000 sq. ft. paper handling facility, sorting conveyor and forklift
Hall County	200,000	Develop model comprehensive commercial and industrial waste reductio initiative, including a reuse center and composting program (Clermont, Gainesville Gillsville, Oakwood, and Flowery Branch)
Hart County	100,000	Replace green boxes with 24 roll-off recycling boxes at eight convenience centers around county
Hartwell	52,000	Conduct feasibility study/phase-in for recycling program, waste stream analysis, equipment, materials, and training

WASTE REDUCTION AND RECYCLING GRANTS (CONT'D)

Recipient	Amount (\$)	Purpose
Hazelhurst	70,000	Expand recycling center; purchase processing equipment
Houston County	64,700	Implement countywide curbside recycling program; purchase recycling bins; conduct recycling public education
Jesup/Wayne Co.	126,328	Expand and equip recycling center to handle biweekly recyclables pickup
LaGrange	100,000	Establish five drop-off recycling centers across city
Lookout Mountain	20,000	Purchase leaf vacuum to handle the large volume of yard trimmings
McRae/Helena	70,000	Purchase equipment for composting operation
Montgomery County	200,000	Initiate a comprehensive incentive-based solid waste and recycling program with recovered materials processing center
North Georgia Waste Management Authority	100,000	Expand recycling activities to three additional counties; provide infrastructure to participants (Lumpkin, Towns & Union; will add three more)
Nahunta	20,000	Purchase wood chipper to handle yard trimmings
Newton County	150,000	Construct a Recyclable Material Collection and Distribution Facility (Covington, Oxford, Porterdale, Mansfield, and Newborn)
Oglethorpe County	21,500	Purchase two recycling separation trailers and truck for towing trailers
Paulding County	98,150	Develop recycling public information and education; construct recycling center (Dallas, Hiram)
Perry	15,000	Enhance recycling center; purchase trailer and containers
Pike County	45,000	Purchase wood chipper; develop composting program
Pine Mountain	20,000	Purchase wood chipper; develop composting program
Polk County	75,000	Eliminate green boxes; develop six convenience centers
Portal	10,000	Purchase baler, platform and chipper
Preston/ Webster County	50,000	Construct staffed recycling facility; purchase processing equipment
Rabun County	100,000	Construct staffed recycling drop-off center
Roberta	75,000	Expand recycling center; construct new building; accept recyclables from surrounding jurisdictions (Crawford County)
Roswell	200,000	Expand existing recycling center; construct new building to house operations
Screven County	100,000	Construct recycling and waste drop-off centers; eliminate green boxes (Sylvania, Oliver, Newington, Rocky Ford, Hiltonia & Cooperville)
Statesboro	100,000	Construct recycling processing center (Bulloch County)
Sumter County	30,000	Construct waste and recycling education center (Americus)
Troup County	50,000	Develop convenience centers with recycling operations
Tybee Island	35,000	Purchase tub grinder for shared use with other jurisdictions
Vidalia	50,000	Purchase bobcat loader and horizontal baler to expand recycling center
Villa Rica	25,000	Conduct solid waste reduction study; assess options for recycling program
White County	18,850	Purchase wood chipper to handle storm debris and yard trimmings
Wilkinson County	100,000	Develop additional convenience center; develop recycling public information (Twiggs County, Allentown, Danville, Gordon, Irwinton, Ivey, Jeffersonville, McIntyre, and Toomsboro)
Zebulon	15,000	Purchase recycling bins for local residents
TOTAL:	\$4,027,600	

SCRAP TIRE CLEANUP GRANTS

Recipient Am	ount (\$)	Purpose
Appling County	21,240	Scrap Tire Pile Cleanup
Athens-Clarke County	25,500	Scrap Tire Recycling Event
Augusta-Richmond	35,972	Scrap Tire Recycling Event
Augusta-Richmond	54,028	Scrap Tire Pile Cleanup
Baker County	23,940	Scrap Tire Pile Cleanup
Baker County	9,500	Scrap Tire Recycling Event
Banks County	29,452	Scrap Tire Pile Cleanup
Barrow County	17,337	Scrap Tire Pile Cleanup
Ben Hill County	15,735	Scrap Tire Recycling Event
Berrien County	12,238	Scrap Tire Recycling Event
Bibb County	2,944	Scrap Tire Pile Cleanup
Bleckley County	11,515	Scrap Tire Recycling Event
Brantley County	20,823	Scrap Tire Pile Cleanup
Brooks County	13,113	Scrap Tire Recycling Event
City of Brunswick	10,343	Scrap Tire Pile Cleanup
Bulloch County	27,753	Scrap Tire Recycling Event
Camden County	19,000	Scrap Tire Recycling Event
Candler County (Keep Southeast Georgia Beautiful)	172,300	Scrap Tire Recycling Event
Charlton County	25,812	Scrap Tire Recycling Event
Clay County	8,033	Scrap Tire Recycling Event
Clayton County	59,902	Scrap Tire Pile Cleanup
Clinch County	29,503	Scrap Tire Recycling Event
Coffee County	42,020	Scrap Tire Recycling Event
Colquitt County	72,561	Scrap Tire Recycling Event
Cook County	11,364	Scrap Tire Recycling Event
Crisp County	10,680	Scrap Tire Recycling Event
Decatur County	17,900	Scrap Tire Recycling Event
Dodge County	23,982	Scrap Tire Pile Cleanup
Dooly County	10,728	Scrap Tire Recycling Event
Dougherty County	21,927	Scrap Tire Recycling Event
Douglas County	51,779	Scrap Tire Pile Cleanup
Early County	13,425	Scrap Tire Recycling Event
Echols County	2,622	Scrap Tire Recycling Event
Elbert County	7,700	Scrap Tire Recycling Event
Franklin County	83,485	Scrap Tire Pile Cleanup
City of Gainesville	5,727	Scrap Tire Pile Cleanup
Grady County	13,693	Scrap Tire Recycling Event

SCRAP TIRE CLEANUP GRANTS (CONT'D)

Recipient	Amount (\$)	Purpose
Habersham County	8,241	Scrap Tire Recycling Event
Irwin County	6,993	Scrap Tire Recycling Event
Jackson County	11,040	Scrap Tire Recycling Event
Jeff Davis County	11,234	Scrap Tire Recycling Event
Johnson County	11,436	Scrap Tire Recycling Event
Lanier County	4,371	Scrap Tire Recycling Event
Lanier County	32,361	Scrap Tire Pile Cleanup
Laurens County	21,912	Scrap Tire Recycling Event
Lee County	20,955	Scrap Tire Recycling Event
Lee County	2,375	Scrap Tire Pile Cleanup
Lowndes County	28,500	Scrap Tire Recycling Event
Lumpkin County	69,595	Scrap Tire Pile Cleanup
Macon County	8,900	Scrap Tire Recycling Event
Madison County	7,200	Scrap Tire Recycling Event
Marion County	5,340	Scrap Tire Recycling Event
Miller County	9,000	Scrap Tire Recycling Event
Mitchell County	15,585	Scrap Tire Recycling Event
Newton County	18,000	Scrap Tire Recycling Event
Oconee County	7,200	Scrap Tire Recycling Event
Oglethorpe County	63,325	Scrap Tire Pile Cleanup
Oglethorpe County	5,838	Scrap Tire Recycling Event
Pierce County	20,518	Scrap Tire Recycling Event
City of Pooler	9,103	Scrap Tire Pile Cleanup
Pulaski County	6,864	Scrap Tire Recycling Event
Rabun County	9,500	Scrap Tire Recycling Event
Rockdale County	318,860	Scrap Tire Pile Cleanup
City of Rome	27,747	Scrap Tire Recycling Event
City of Savannah	36,800	Scrap Tire Recycling Event
Schley County	4,458	Scrap Tire Recycling Event
Seminole County	28,667	Scrap Tire Recycling Event
Spalding County	15,000	Scrap Tire Recycling Event
Sumter County	18,067	Scrap Tire Recycling Event
Taylor County	7,120	Scrap Tire Recycling Event
Telfair County	17,282	Scrap Tire Recycling Event
Terrell County	31,448	Scrap Tire Recycling Event
Thomas County	14,250	Scrap Tire Recycling Event
Tift County	17,484	Scrap Tire Recycling Event
Turner County	7,868	Scrap Tire Recycling Event
City of Union City	4,000	Scrap Tire Pile Cleanup

1997 Solid Waste Management Annual Report

SCRAP TIRE CLEANUP GRANTS (CONT'D)

Recipient	Amount (\$)	Purpose
Walton County	7,340	Scrap Tire Pile Cleanup
Wayne County	20,906	Scrap Tire Recycling Event
Webster County	18,085	Scrap Tire Recycling Event
Whitfield County	5,793	Scrap Tire Pile Cleanup
Whitfield County	1,670	Scrap Tire Recycling Event
Wilcox County	6,540	Scrap Tire Recycling Event
City of Winder	8,000	Scrap Tire Recycling Event
Worth County	18,563	Scrap Tire Pile Cleanup
Worth County	13,100	Scrap Tire Recycling Event
Total	2,396,750	

GLOSSARY OF TERMS

	acoonii oi iciliio	
Definitions derived from the:	Georgia Comprehensive Solid Waste Management Act (O.C.G.A. 12-8-20 et seq.).	
Closure	a procedure approved by the division which provides for the cessation of waste receipt at a solid waste disposal site and for the securing of the site in preparation for postclosure.	
Commercial solid waste	all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.	
Composting	the controlled biological decomposition of organic matter into a stable, odor-free humus.	
Disposal facility	any facility or location where the final deposition of solid waste occurs and includes but is not limit to landfilling and solid waste thermal treatment technology facilities.	
Drop-off centers	staffed or unstaffed facilities with large collection bins for household solid waste and, usually, recyclab	
Generator	any person in Georgia or in any other state who creates solid waste.	
Green boxes	common name for large, unmanned solid waste collection bins	
Industrial solid waste	solid waste generated by manufacturing or industrial processes or operations that is not a hazardous waste regulated under the Georgia Hazardous Waste Management Act. Such waste includes, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer and agricultural chemicals; food and related products and by-products; inorganic chemicals; iron and steel products; leather and leather products; nonferrous metal and foundry products; organic chemicals; plastics and resins; pulp and paper; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textiles; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.	
Landfill	an area of land on which or an excavation in which solid waste is placed for permanent disposal and which is not a land application unit, surface impoundment, injection well, or compost pile.	
Leachate collection system	a system at a landfill for collection of the leachate which may percolate through the waste and into the soils surrounding the landfill.	
Materials recovery facility	a solid waste handling facility that provides for the extraction from solid waste of recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.	
Municipal solid waste	any solid waste derived from households, including garbage, trash, and sanitary waste in septic tanks and solid waste from single-family and multifamily residences, hotels and motels, bunkhouses, campgrounds, picnic grounds, and day use recreation areas. The term includes yard trimmings and commercial solid waste but does not include solid waste from mining, agricultural, or silvicultural operations or industrial processes or operations.	
Municipal solid waste disposal facility	any facility or location where the final deposition of any amount of municipal solid waste occurs, whether or not mixed with or including commercial or industrial solid waste, and includes, but is not limited to, municipal solid waste landfills and municipal solid waste thermal treatment technology facilities.	

1997 Solid Waste Management Annual Report

or More Information:	Georgia Department of Community Affairs	Georgia Department of Natural Resources	
Yard trimmings	leaves, brush, grass clippings, shrub and tree prunings, discarded Christmas trees, nursery an greenhouse vegetative residuals, and vegetative matter resulting from landscaping development an maintenance other than mining, agricultural, and silvicultural operations.		
Waste-to-energy facility	a solid waste handling facility that provides for the extraction and utilization of energy from municipal solid waste through a process of combustion.		
Solid waste handling facility	any facility the primary purpose of which is the storage, collection, transportation, treatment, utilization, processing, or disposal, or any combination thereof, of solid waste.		
Solid waste handling	the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste or any combination of such activities.		
Recycling	any process by which materials which would otherwise become solid waste are collected, separated, o processed and reused or returned to use in the form of raw materials or products.		
Recovered materials processing facility	a facility engaged solely in the storage, processing, and resale or reuse of recovered materials Such term shall not include a solid waste handling facility; provided, however, any solid waste generated by such facility shall be subject to all applicable laws and regulations relating to such solid waste.		
Recovered materials	those materials which have known use, reuse, or recycling potential; can be feasibly used, reused, o recycled; and have been diverted or removed from the solid waste stream for sale, use, reuse, o recycling, whether or not requiring subsequent separation and processing.		
Postclosure	a procedure approved by the division to provide for long-term financial assurance, monitoring, and maintenance of a solid waste disposal site to protect human health and the environment.		
Permit-by-rule facility	a solid waste operation that requires notification of EPD within 30 days of commencing activities an compliance with criteria established in DNR rules for that category of operation.		
Operator	the person stationed on the site who is in responsible charge of and has direct supervision of daily fiel operations of a municipal solid waste disposal facility to ensure that the facility operates in compliance with the permit.		
Municipal solid waste landfill	a disposal facility where any amount of municipal solid waste, whether or not mixed with or including commercial waste, industrial waste, nonhazardous sludges, or small quantity generator hazardous waste, is disposed of by of placing an approved cover thereon.		

Office of Waste Management

60 Executive Park South, NE Atlanta, Georgia 30329 Phone: (404) 679-4940 Fax: (404) 679-0572 www.dca.state.ga.us

Georgia Environmental Facilities Authority

100 Peachtree Street 20th Floor Atlanta, Georgia 30303

Phone: (404) 656-0938 Fax: (404) 656-6416

www.gefa.org

Environmental Protection Division

Land Protection Branch 4244 International Parkway • Suite 104

Atlanta, Georgia 30354 Phone: (404) 362-2537 Fax: (404) 362-2654

www.dnr.state.ga.us/dnr/environ

Pollution Prevention Assistance Division

7 Martin Luther King Jr. Drive, Suite 450

Atlanta, Georgia 30334 Phone: (404) 651-5120 Fax: (404) 651-5130 www.dnr.state.ga.us/dnr/p2ad

GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

60 Executive Park South, NE Atlanta, Georgia 30329-2231

Document Number: 0299

